CASE STUDIES OF WINNING STRATEGIES: RECRUITING & RETAINING STUDENTS TO CTE PROGRAMS THAT ARE NONTRADITIONAL FOR THEIR GENDER

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FOREWORD

This report captures strategies used by institutions that have received Perkins grants from the New York State Education Department to effectively recruit and retain students to Career and Technical Education (CTE) programs that are nontraditional for their gender. These programs are male and female dominated occupations where there is less than 25% of either gender. The data used for the case study analysis presented in this report was collected by interviewing officials from 6 institutions which have met and often exceeded their targets for recruitment and retention. It is our hope that the recommendations provided at the end of the report will help other institutions to replicate these strategies. However, since each institution has its unique climate and culture, what worked in one institution may not necessarily work in another. Conducting a climate assessment is critical to effective adaptation and transfer of these strategies. This study was conducted during the 2015-2016 academic year.

Acknowledgement

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Introduction

The Nontraditional Employment & Training (NET) Program provides technical assistance to institutions that provide Career & Technical Education (CTE) Programs and that receive Perkins grants from the New York State Education Department. NET seeks to assist institutions in increasing recruitment and retention of students who are pursuing CTE programs that are nontraditional for their gender. These are programs where there is less than 25% of either gender.

Achieving a gender balance in these occupations is critical for several reasons:

- It is a matter of economic development. Demographic changes coupled with retirement of the baby boomers means that employers need to draw from a larger pool of workers and can no longer rely on the traditional narrow pool of workers. Women represent an untapped resource in male dominated CTE programs and vice versa. Our ability to meet demands of the workplace and maintain a global competitive edge requires that we proactively and deliberately develop the next generation of workers that the economy needs.
- It is a matter of economic justice which mandates that each individual has full and unhindered access to all viable occupations, including those that are traditionally male or female dominated.
- It is a matter of gender equity. By dismantling the artificial dichotomy that dictates what men and women can do in the realm of work, we are deconstructing harmful stereotypes and breaking down barriers that hinder individuals from achieving their full potential and contributing productively to the economy.

This report captures institutional strategies that were successfully deployed by high performing institutions in reaching recruitment and retention targets of students in CTE programs that are nontraditional for their gender. Quantity matters just as much as quality. It is a numbers' game, and we are seeking a numerical increase in the number of professionals in these occupations. We are focusing on institutions that have succeeded in increasing their numbers, while maintaining quality. A self-assessment conducted last year by the NET project with Perkins granted institutions revealed that perception is not reality. Institutions may believe that they have successful systems in place to increase their recruitment and retention numbers, but in many cases, the same institutions that ranked themselves high on the spectrum of the recruitment and retention scale, have performed poorly and fell below their targets.

The gap between perception and reality can create an artificial barrier to the success of institutions. If one believes that the system in place is effective and efficient without a hard look at the outcome it is generating (or failing to generate), one continues to resist change. The bottom line is that if strategies and systems are not able to increase the recruitment and retention numbers, it is time for change. Having said that, we must acknowledge that the persistence of the problem of male and female dominated careers is a cultural problem. Changing cultures is a formidable challenge that requires proactive, collective and deliberate actions. It takes a concerted multi-dimensional effort that mainstream the problem in all levels of institutional systems. It takes integrating a gender perspective in mainstream recruitment, marketing, communications, admissions, advisement, curricular development, professional development and

classroom spaces. In addition to a mainstreaming approach, there is a need for a targeted approach that seeks the proactive recruitment of students from the underrepresented gender in each CTE program, and institutionalizing support infrastructure to ensure their retention.

This study captures strategies utilized by 6 institutions which ranked at the top 10 in 2013-2014 fiscal year.

Each of these institutions completed a preliminary survey about their external and internal landscapes and participated in telephone interviews where they shared insights about the strategies they utilized in successfully recruiting and retaining students to CTE programs that are nontraditional for their gender. Below are findings, analysis and recommendations that emerged from this study.

Results & Findings

1. Case Study A

1.1.About the College/ Region

Institution A is located in the Southern Tier region. It is surrounded by a few other institutions of higher education, within just ten miles from its location. Therefore, the economy and population in the area is very academically driven. Over 50% of its total students come from the immediate area, however a sizable percentage of students come from outside areas as well, particularly from downstate. Even though its rural location is a hindrance, Institution A has used its academic quality, strong relationship with regional businesses, and strong academic/student services to attract students.

The area has a burgeoning industry in chemical sciences and biological science. They plan to start an applied science and technology program by next fall that is specifically focusing on mid-level technician jobs in multiple fields. This year they started two new programs, which include a Culinary Arts program and a Sustainable Farming and Food Systems program.

1.2.Challenges facing the Community

Institution A faces a challenge in attracting women in technical fields. This is largely due to the propagation of the stereotype that women cannot succeed in Math, and are even put off by Math. There is a long history of this thought and often women have had to start so many levels below the first requirements of the programs. As a result, many women become discouraged, and do not consider this field. It is difficult to recruit in any field with a significant math requirement.

Another challenge is that most men do not think of nursing as a potential career. However, they are able to recruit people who have a background in EMS (Emergency Medical Services) and/or the military, who already understand the potential for the career.

1.3. Winning Strategies

- Institution A has a very large concurrent enrollment program, which offers dual credits. They have partnerships with 56 high schools in the region, with over 5000 students, who take the concurrent enrollment courses.
- Their recruiters are working all over the state, all of the time. They also subscribe to a national admissions organization to receive names of prospective students.
- They utilize a web-based program called career coach that conveys the direct relationship between academic programs, career options, and available jobs in the community. It describes the job picture and available positions, which makes it a powerful tool for recruiting students. Additionally, it helps to identify potential partners, including business/industry partners and nonprofits.
- This year they are starting a new peer career coach program initiative. It will be a one-stop shop for employers, agencies, students, and staff within the institutions to find information on where internship and job opportunities may exist and match people with opportunities.
- The External Relations office has developed strong business partnerships. Many of the nontraditional programs have requirements that include internships, externships, and cooperative education initiatives. Hence, there are hundreds of local businesses and agencies where students have been placed, and continue to be placed. They are very closely connected to the local workforce.
- The college does not hire faculty that are not committed to their students. Moreover, until they reach a tenured status, which is a six-year process, they undergo a rigorous yearly evaluation process. The college is known to have asked people to leave after only a couple of years.

1.4. Analysis

- There is a lot that happens on campus organically because of the interest of the faculty. For example, a faculty member in the computer science department took a group to a hacker's competition. They were the only community college at the event. Three of the five members of the team were women, including the captain. The faculty has an inclination towards nontraditional occupations, making them very supportive of the Nontraditional Employment and Training program.

> "The college has a deeply held belief that every student that walks in the door has the potential to succeed. Coupled with that, the institution recognizes that each of the students bring with them different barriers that may make attaining success difficult. In order to be a part of students' success, the duty of everyone within the institution is to assist students in understanding what those barriers may be and to help them work through them."
> Institution A Representative

- The college does not have a nontraditional occupation coordinator. It was a conscious decision, as it is thought that one person would not have the breadth of knowledge of the institution needed to handle the responsibility. The college does not believe that this responsibility should be tasked to a single office or person, and rather the institution weaves the ideals throughout the college. They strive towards this integrated approach, to avoid having only one person or office carrying this important weight.

2. Case Study B

2.1. About the College/ Region

Institution B is located in rural Upstate New York. The region is undereducated and economically disadvantaged. It is among the lowest ranked in the State for adults attaining associate or bachelor degrees. The economy is based on multiple part-time employments. Institution B uses intensive advising and strong support services for recruiting and retaining nontraditional students. This two-year college is reasonably priced and has a high academic quality. Its programs offer applied learning, which promotes hiring at local and regional facilities. The region has two highly visible professions that are well-respected, well- paying and have demand. These professions include criminal justice for females and health care professions for males.

2.2. Challenges facing the College
- There is a limited understanding of opportunities provided by nontraditional programs. The challenge lies in alerting the prospective students to the avenues available to them.
- There is a limited amount of prospective students because the college is located in a small, rural town. The lack of public transportation in the rural setting amplifies the challenge for recruitment.
- The severely cold climate and cost of day care are also among the challenges in recruitment and retention.

2.3. Winning Strategies
- One of the strategies Institution B uses is targeted communication with prospective students through emails. They receive student information using a service from the National Research Center for College and University Admissions (NRCCUA). This strategy provides the institution with the opportunity to reach more people and improve the chances for recruitment.
- They have a threefold communication strategy.
  - Banners that have images of nontraditional students in the field are taken to high schools.
  - Commercials on TV stations and Radio stations.
  - Testimonies from graduates are put on podcasts and embedded in the emails sent to the prospective students. These podcasts are also used in other communication materials.
- The Nursing Director is male, as is one other nursing faculty member. These two role models help attract more men in the healthcare programs.
- As this is a small school there is no shadowing program, however students have a direct relationship with their instructors. Rather than having a set of professional advisors who rarely

"I think that you have to cast a wide net and use multiple resources"
                Institution B Representative

contact the student, Institution B utilizes the faculty to advise the students, which would be very challenging in a larger school.

- Grants, such as the Perkins Grant, have helped the institution focus on things they might not necessarily have paid attention to because of lack of funding or as a result of a different focus.
- With regards to partnership, each of the professional programs has a professional advisory council that includes educators from K 3 through 12, BOCES, and four year units. Alumni and community members are invited as well. Their partnership with businesses provides information about the different fields to ensure the curriculum is up to date. Businesses also give the college ideas about the sort of skill building the students need to have.
- Institution B has a strong engagement of students by faculty, by their student affairs office, and by their learning assistance center. Faculty members are assigned as advisors. In most cases, the same faculty member will be the advisor for a student throughout their experience. Faculty members meet with the students personally when students register for the new semester. Faculty advisors review graduation requirements, career plans, internship opportunities etc. Additionally, an early warning system has been developed that refers low performing students prior to the midterm exam, so such students can be identified and possible interventions implemented early on. Due to its personalized quality, the one-on-one advisement is very effective. The institution has an extensive learning assistance center whose goal is to address the needs of the students. There is a wide array of services such as professional tutors, peer tutors, study groups, skill building talks, computer labs to complete assignments, an active librarian to help with research assignments, and an extensive online journal database and internet access as students may not have access at their home.

2.4.Analysis

- Opportunities for internships and job shadowing are very challenging for this institution because of their rural location. About 70% of the students work 20 hours or more a week in addition to attending school. Student success outside of the classroom, once they have completed their academic program, revolves around developing soft skills, including communication, analytics, punctuality, and very basic kinds of workplace skills. As a result, the institution has focused on developing opportunities within class to work in groups and work on developing those skills.
- Since the students come generally from an uneducated and economically disadvantaged region, having small classes allows faculty members many informal opportunities to interact with the students and help them with their concerns.
- One of the biggest areas the college grapples with is providing counseling. Many of the students have psychosocial issues that predate arrival on campus. Hence, the institution works on esteem building and providing activities where students can come together and seek out natural support groups and friendships. Even though there are these resources available to assist students, they are not always effective because people are usually rushing off to work as soon as their classes are over.

3. Case Study C

3.1. About the College/Region

Institution C is located in the Capital Region. Many of their faculty are nontraditional themselves in terms of the dominant gender composition of the fields they are teaching. The institution is committed to providing well-rounded, diverse faculty and staff in all regards.

3.2. Challenges facing the College

- Due to the cost of childcare, many people are forced to stay at home with their children rather than attend school or participate in the workforce, because there are no affordable childcare options and they cannot receive childcare assistance.
- Having all faculty and staff involved in recruiting is the biggest challenge in recruiting students pursuing nontraditional occupations for their gender. Getting these faculty and staff members to understand what the nontraditional student population is, and helping them to get the information is crucial, because then they can guide the students while they are considering those types of programs.

3.3. Winning Strategies

> "We are good at being available to our students! … Our faculty and staff are open to the students and allow the students to come to us when they need us."
>
> Institution C Representative

- The Nontraditional Career advisor position that has been in place for a few years has brought clarity to the goals and strategies of nontraditional recruitment and retention. Building partnerships and relationships to engage the different departments involved in recruiting and retaining students has been a key task. Before the position was in place, outreach was targeted only to the new first semester nontraditional students. That has changed now, as the office reaches out to students on a continuous basis. This has improved student engagement and the office is receiving more interest and inquiries
- Institution C maintains community partnerships for employment opportunities for students as well as for resource sharing. Many of the faculty and staff take part in events that both promote the campus as well as support the community. For example, the institution has resume review workshops at community job fairs and career readiness program supports. All of their career events are designed to be educational programs as well. They also have partnerships with the Women's Employment Resource Center, YWCA, YMCA Housing Program, and the NY STEM-National Girls' Collaborative Project.
- Institution C has effective student support services. They provide tutoring programs, mentoring programs; EOP (Educational Opportunity Program) services, language services, and labs for computer and math. Service for counseling and advising are also available.
- They ensure that staff members involved in tutoring and mentoring; and are aware of the challenges that the nontraditional students may have. When a student is having a difficult

time, they pull out all the stops to help them become successful. They take pride in being available to their students.

- Institution C's approach is to meet each student where he/she is, by looking at the students and what their particular goals and interests are. Helping the students attain their goals and engage in their interests is the institution's most important duty because it is unrealistic to expect cookie cutter services to meet all the needs of the students. They assist students in becoming successful, in whatever way they define that success.

3.4. Analysis

- The local school districts are doing a great deal to foster STEM for females. Several BOCES Programs in the surrounding counties also help prepare students, especially for culinary and criminal justice work. The BOCES program and the high schools have an emphasis on the science and technology fields. These programs have been very open in allowing the institution to go into the high school and talk to students about available options.
- Showing investment in the community is a great way to get support and build lasting partnerships that is mutually beneficial and goes beyond the purpose of recruitment.
- The Nontraditional Career advisor position has been helpful in integrating the efforts of different faculty and administrative staff with regards to nontraditional recruitment and retention.
- As all career events are designed to be educational events as well, the college is able to provide more learning opportunities for their students.

4. Case Study D

4.1. About the College/ Region

Institution D is located in Downstate New York. It lies in an urban setting and is well connected with public transportation. This allows for outreach to a large pool of prospective students. Additionally, it is located within a walk-able distance of 5 high schools. It is a known entity in the nearby student community and serves as a community hub where people come to on a regular basis.

4.2. Challenges facing the college

Some students find fee-based courses and training expensive and it is difficult to find a business to partner with in order to offer the courses at a reduced cost.

4.3. Winning strategies

- Institution D provides help to the nontraditional students who require additional support to fill out their applications. In addition to providing one-on-one counseling to the students, they provide counseling where family members are also part of the conversation.
- Institution D offers pre-enrollment activities, including group chats and has pre-enrollment advisement for every prospective student.

> "We try to integrate our resources to maximize impact"
> Institution D Representative

- Different people update the College's Facebook and Twitter accounts throughout the day, so current and prospective students have timely information.
- The institution uses the Customer Relationship Management (CRM) model to weave and coordinate outreach and synchronize efforts so that it does not lose students moving from one step to another in the enrollment process.
- In addition to targeting new students, the institution focuses largely on internal recruiting.
- The institution has used its articulation agreements to recruit and retain nontraditional students. The assurance that the students have a clear pathway to further education attracts more students. The institution has articulation agreements with several colleges and is actively expanding them.
- The institution ensures that students are given the support they need to encourage the retention of students in the more technical fields.
- Institution D engaged 200 members of faculty and staff in conversations on how the college could learn about student experiences, address shortcomings, and improve graduation rates. Advising was identified as a strong theme to improve these areas. Previously, a general advising technique was utilized. This has evolved into discipline specific advising, where advisors team up with specific faculty members from departments to provide the student with a closer relationship with faculty within their discipline and to encourage a connection to their studies, their careers, and/or study prospects.
- In addition to discipline specific peer mentoring, the institution provides open labs. They supply professional tutors, specifically targeting those students that are known to have high failure rates. The college also engages in a program called, 'early alert'. Faculty members are asked to provide progress grades for those that are identified as special programs.
- Graduation is a main focal point. All conversations and activities are geared towards the goal of graduation. Thus, students are aware of how every step in the process is getting them closer to graduation. This has been a successful strategy in improving retention.

4.4. Analysis
- Institution D has a larger draw due to its urban setting. The college utilizes internal recruiting as a strategy to get more students into the nontraditional programs. While the strategy seems successful in urban settings, it may not be feasible in rural locations.
- The articulation agreements and the focus on graduation are successful strategies at keeping students motivated and in the program.
- The institution feels fortunate because media outlets emphasize the idea that anyone can succeed in any role, even nontraditional ones. They do not face the challenge of having to change stereotypical attitudes and perceptions. This may be due to the fact that they are in an urban setting.
- The college has a strong focus on pre-enrollment advisement. It provides group chats to answer questions and extra support to people that may have difficulty with language or technology. College staff members talk to prospective students and their families. Putting emphasis on starting strong has proven to be effective. In addition, they are making sure that they do not lose students when moving from one step to the next.

5. Case Study E

5.1. About the College/ Region

Institution E is located in Western New York. They are mostly a career and technical education college that has a large focus on health science programs. The surrounding areas have high unemployment rates and rampant poverty and building vacancies. The outreach program attempts to target nontraditional populations, which is consistent with their mission of trying to help people and give them the education and tools to improve their lives.

Since the institution is a commuter college, they have difficulty in engaging traditional aged students because they do not offer the typical student lifestyle. They are a small private college, but they have more in common with community colleges than other private institutions.

5.2. Challenges facing the college
- Many people do not think of nontraditional professions as an option. This may be due to biases of the students, lack of awareness, or simply that they never considered it.
- Most of their students enroll to obtain technical education, so that after completing two years, they can support their families more effectively. Many of these students are juggling education with family and jobs. Catering to the needs of such students is a major challenge for the college.
- Competitors are larger institutions that are publicly funded and less expensive.
- Some of the technical programs are very competitive making entry difficult for prospective students. This makes increasing the retention of gender unbalanced fields, and ensuring that students have the aptitude to succeed in the program, a challenge.

5.3. Winning strategies
- Institution E finds that the boots on the ground approach to student recruitment is more effective than traditional advertising on billboards, radio stations, and social media, however they use all approaches. The College tries to maintain a presence in community centers and religious institutions, in addition to high schools and employment agencies, to try to tap into their networks.

> "I think you have to look at what worked and didn't work and keep trying new things'
>
> Institution E Representative

- The institution has a blog that highlights nontraditional career paths. It is a monthly blog post that highlights students currently in those programs and their experiences. It spotlights student alumni in those areas; and discusses the option of nontraditional professions for those students that they may never have thought of.
- To attract male students, advertisements are placed on a sports radio station and to attract women to technology, the college has set up an arrangement with the Girls Scouts to introduce young girls to technology, and generate excitement about the field.
- From an advisement perspective, the college talks to students about opportunities that may suit them and their interests. In the first semester, students whose general studies are

undeclared are targeted for nontraditional programs; and the information on the opportunities available in those fields is reinforced.

- In the nursing program, the third semester seems to be the tipping point for students to drop out. Completion of this semester seems to be a good predictor of success. The institution has examined the pivotal courses in semester, and identified what is causing the most difficulty for students. During this semester, students are provided additional academic support such as peer mentoring, study groups, etc.
- From the perspective of nontraditional students, there has also been an effort to create a network or bonding experience so students can create a support system for each other to discuss problems and find support.
- The college has partnerships with institutions that can help students who have English as a second language. They have support services for the economically distressed, as they partner with organizations that work with such populations. They also have partnerships with organizations that work with domestic violence victims. Such partnerships enable the college to connect students with resources they may need. They are in a city that is large enough to have a large pool of resources, but small enough so that everyone knows one another.
- Institution E created a Coordinator of Nontraditional occupations position. This person's duties include discussing nontraditional occupations and going out to areas that may have nontraditional populations.

5.4. Analysis

- The institution has two community colleges in the area that are the largest competitors. However, they have a small student to faculty ratio, which makes the institutions more desirable than the other colleges for students.
- Like some other institutions, this institution has used internal recruitment.
- Institution E is a closely-knit community that students find inviting. It is easy to get the faculty and staff to buy in because the college is small. Everyone's focus is on how best to support the students. As a result of this focus, the responsibility of recruiting nontraditional students does not fall solely on the coordinator of nontraditional occupations.

6. Case Study F

6.1. About College/ Region

Institution F is a two-year college located in Downtown Metropolitan area. It is in a great location with easy access to mass transit. The institution has colleges in four different locations, making it convenient for students.

6.2. Challenges facing the college

- When a field is predominantly male or female it is not easy to attract people of the opposite gender. It is hard to break the preconceived notions of who the profession is appropriate for.

- It is very important to educate the whole family about the importance of nontraditional careers, as students enrolling in nontraditional courses may often receive negative reactions in their homes.
- Sometimes the prospective students cannot afford to come to school. Students are working and they have family responsibilities. It is difficult to balance school, work, and life. Working with students that have these difficulties is challenging for management.

6.3. Winning strategies

- Institution F works with community-based organizations and high schools in order to let students know what the institution has to offer.
- To break down preconceived notions, the college educates prospective students about the professions and shows them how successful they can be in the field, regardless of their gender. They do this by engaging students in conversations with graduates who share their success stories.
- A variety of alumni are highlighted in the brochures so current and prospective students can get a sense of what graduates are doing.
- There is tutoring and peer mentoring available within the program.
- The career development center helps students understand what a nontraditional career is and if it is a good fit for them. Once they make that commitment, the students are advised to research their chosen field so they are highly aware of the opportunities and challenges in the field. The institution provides great support, but it places the responsibility on the students to understand the majors that they will be going into. This allows the student to make informed decisions rather than having the school leading the way.
- There is active internal recruitment of students who are undecided or are pursuing liberal arts. This recruitment encourages more nontraditional and career oriented pathways.
- Institution F has great evening and weekend programs that are open 7 days a week, from 7 AM until 11:00PM-11:30PM. Some of the nontraditional program students are students who are going into their second career. These students are often not willing to stop working because they can't afford it, as they have families of whom they need to take care. Having evening courses, having weekend courses, and being able to take online courses helps students complete their education in a way that makes sense without having to drop everything and put their lives on hold.
- The institution has a formal partnership with a High School. Students who complete their high school education there can get their Institution F education paid for.
- The institution has two grants that include components that center on recruiting nontraditional students. Getting grant funding can be a good way to draw administration and faculty's attention and efforts towards efforts that might not have been a prime focus.
- Institution F has an abundance of resources available to students to support them emotionally and financially. They offer yoga, meditation techniques, funding for books, and other types of resources that the college provides to them for whatever issues they may face.

6.4. Analysis

- The school is aware that the kind of assignments given and the approach to teaching can either help or turnoff the nontraditional students. This awareness is key.

- The real strength for this institution has been the involvement of academic partners and the chairs. The faculty has always been engaged in designing programs and in all of its activities.
- An approach that is unique to this institution is the assignment to students to research the nontraditional field so they have a clear idea of the field that they are going into. It is an approach that is meant to empower the students.

Analysis & Discussions

1. Major challenges facing the colleges

- Breaking down gender stereotypes of nontraditional occupations
- Students' reluctance to join programs that are nontraditional for their gender
- Limited awareness of potential opportunities
- Difficulty to recruit in programs that have significant math requirement/ challenging programs
- College's location can be a hindrance
- College cost
- Smooth communication between faculty and administrative staff for recruiting and retention

The biggest challenge facing colleges is the cultural misperception of what men and women are capable of doing, and the socially-constructed gender stereotypes. Since it is strongly embedded in our minds and cultures, it hinders people from even considering a career in occupations that are nontraditional for their gender.

When students do decide to pursue careers that are nontraditional for their gender, they require extra support and encouragement to ensure that they complete their education. College experience is challenging for everyone, but the nontraditional students find it even more challenging because they are going against internal and external social expectations and norms.

It is difficult to recruit and retain nontraditional students in programs that are highly competitive or have high cost. Competitive programs have demanding admission requirements and also rigorous coursework. Not everyone who applies can get in, and not everyone who gets in can complete the program.

Another challenge in recruiting and retaining nontraditional students is coordination and communication among administrative staff and faculty. Nontraditional students can fall through the cracks if enough attention is not paid to their success.

Many colleges fail to meet the target of recruiting and retaining nontraditional students simply because they come from a rural location, and do not have the big pool of students that some colleges in the urban settings do.

2. Different strategies used by colleges

2.1. Research based strategies

Monitoring, data collection and analysis allow colleges to measure performance. As the old saying goes, what gets measured gets done and gets done well. The collected data has to be analyzed to assess the situation, analyze trends, make comparisons, identify gap areas and implement corrective actions. Studies help identify challenges and successful strategies.

Development is a cyclical process, so the information should be used to make modification and take necessary actions.

Objective setting and measuring the results is crucial for achieving better outcomes. Measuring outcomes and results gives organizations feedback for improvement and shows if the way the resources being used are working or require adjustments. Making progress is a cyclical process. Without measuring outcomes, organizations will not know which direction they are heading in. Thus measuring outcome is required for clarity and progress towards goals.

It is important to trace the program from start to end. It helps to clarify the program's goals by providing details of objectives, tasks and targets. It can help build accountability by documenting who is responsible for which task. It is a great way to keep track of progress.

2.2.Targeted Recruitment

Target-emailing narrows down the pool of prospective students, allowing the colleges to concentrate on student populations who are interested in their programs and serious candidates; and using limited resources more efficiently. Colleges can use services from organization like NRCCUA (National Research Center for College and University Admissions).

2.3.Use of Web-Based Tools

Web based tools like career coach is a powerful instrument that can be used to educate people, inform them of alternatives and also to persuade them to pursue a certain field. When choosing a nontraditional field, students may have questions about who else have done so? How profitable is it? Why is that a good idea? This tool helps answer those questions; and once students have the answers to their questions, they can make informed decisions about their career choices. Entering nontraditional careers help students pursue a career that is high paying and well-respected. Tools like these help shed light on the advantages of joining nontraditional programs.

2.4.Showcasing of successful nontraditional students in marketing and communication materials

Breaking gender stereotype is the biggest challenge in recruiting nontraditional students. Gender specific advertising also helps to reach target population of young male/female more effectively, and break traditional stereotypes of what career a specific gender should and should not pursue, by creating awareness among the students and in society.

Images of nontraditional students in communication materials convey the message that men and women can enter the field that is considered nontraditional for their gender. Some people have a hard time imagining what that is like. Such efforts attract students to nontraditional careers for their gender; and educate the society by breaking the barrier of traditional gender roles/ occupations.

In order to attract more nontraditional students, it has been effective when prospective students learn about the field, and understand the challenges and opportunities from the students that have done this before. Graduates are a more trustworthy source for the students. Testimonies from the graduated students can be in the form of presentation, in brochures, in blogs and in other

communication materials. Some colleges have tried to use podcasts to embed the testimonies in emails sent to prospective students. Few colleges are using testimonies on their social media.

2.5.Partnership-Building

There are many forms of mutually beneficial partnerships which high-performing colleges utilize. Community based organizations have the network and goodwill already built. They also have access to the population of prospective students among whom these organizations can raise awareness about career, educational and training opportunities. Religious centers, youth clubs are examples. The relationship is mutually beneficial because colleges will be serving the community's interest of a healthier community with better educated, gainfully employed community members. Partnership with community based organizations helps the schools to tap into the organization's network.

Partnership with organizations like YWCA, Girl Scout, Veterans Organizations, etc. can be a win-win for both parties. Since both parties are concerned with the same target group. Partnership with local businesses has been helpful in creating learning, internship and job opportunities for students. Partnerships are beneficial for businesses, colleges and students. On one hand, such partnerships allow businesses to help colleges develop curriculum and insights into which way the market is heading. Colleges get to improve the learning experience of their students and they also receive donations and support from businesses. On the other hand, the business can use this as a strategy to recruit fresh talent and receive increased visibility in the colleges.

Likewise colleges can also form partnerships with different programs with nontraditional inclination, for example, Girls Develop It, National Girls Collaborative Project, etc. Such programs help nurture the interest of the students, provide them hands-on training and expose them to a wide range of opportunities. The partnership is mutually beneficial as they share similar goals.

Partnership with other educational institutions like BOCES, local high schools and colleges has been very fruitful in recruiting and retaining nontraditional students. Students get deterred if the road ahead seems uncertain; but are more likely to stay if there is confidence in the opportunities that await. When students can clearly see the road ahead, can easily move from one step to the other, completing one level of education and smoothly moving on to the other, they are more likely to join and more likely to stay. Some colleges have set up concurrent enrollment programs with high school; and/or articulation agreements with four-year colleges.

2.6.Mentorship

Mentorship allows students to improve their abilities, learn new skills and develop strong relationship of support and encouragement. Peer mentoring helps students through challenging phases and prevents students from dropping out. It is a strong tool for retention.

During their time in college, students learn new skills and explore interests. However, it is challenging to meet the requirements of the coursework and keep an eye on professional

opportunities at the same time. Making decisions on their own can be confusing and daunting to young students. They may feel overwhelmed and isolated during this period. They require guidance and support. Peer mentors and alumni students are best suited to provide that support since the alumni students have gone through the same experiences. Alumni have a different perspective from faculty members, and can have insightful feedback on problems of the current students. Having similar experiences helps bring current and alumni closer; and there is greater trust and comfort between the two groups.

2.7.   Hands-on opportunities

Hands on activities help students learn and retain information. They get to practice the craft which is an exciting prospect for many students. It makes the learning process more engaging. When students perform better in school work, they are less likely to leave the program. Having hands-on internship and externship experiences builds self-confidence and competence. Competence is the best inoculation against turnover. Many colleges are providing tutoring opportunities. Some colleges have partnered with programs like Girls Develop IT that offers hands on instructions.[1]

2.8.   Strong institutional commitment

Colleges perform better in recruiting and retaining nontraditional students if there is genuine commitment from college leadership. When the college is committed to the cause, people working for recruitment and retention find it much easier to perform their jobs.

Involvement of management staff and faculty is important in recruiting and retaining students. It provides different perspectives on recruiting and retaining nontraditional students. Faculty's role is highlighted for retention, because they interact with, and engage the students, and can create a friendly environment of learning for nontraditional students. The faculty has a crucial role in recruiting as well. Faculty is an important factor students consider when choosing a particular school. The combined effort of college leadership and faculty can attract nontraditional students.

2.9.   A designated/dedicated nontraditional coordinator

In addition to having faculty and management staff works together, having a designated staff member to support nontraditional students has improved recruitment and retention. This person can combine and align all the different efforts on recruitment and retention, and focus on nontraditional students' needs.

2.10.   Faculty that reflect diversity of students

In order to attract students to the nontraditional program, faculty composition needs to reflect the diversity the program is trying to promote. Diverse faculty brings diverse perspectives, interests and experiences which will be helpful in identifying innovative ways to increase recruitment and retention for nontraditional students. To attract male students in nursing, it is helpful to have male faculty members. They act as role models and help students see themselves in the program. Such faculty members can understand the experience of the nontraditional students, and thus are better suited to encourage and support them. In many colleges, students participate in different

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[1] To Learn more about this program, visit the NET program website at www.netprogram.org

competitions or take on projects due to the interest of the faculty. Such initiative by the faculty exposes students to new challenges and opportunities.

2.11.   Classroom Environment

Retention of enrolled students depends on the way courses are structured and the classroom environment. Faculty need to be aware of any unconscious bias that could make nontraditional students uncomfortable. Classes need to be engaging and encouraging everyone, and have a respectful environment. Faculty need to be aware of the spoken and unspoken language that may make nontraditional students experience the classroom as an unsafe and intimidating space and will eventually lead to the "leaky pipeline".

Small class size is attractive to students as they will get more attention and have more interactive and engaging classes. This will help students pursuing careers that are nontraditional to their gender as they may require more support and attention.

2.12.   Support Services

Colleges also need to recognize the importance of general services for student retention. In most cases, general services are cut when budget is cut. Some institutions do not let it go as they believe it to be a necessary part of services. Students are more likely to leave the program when they are going through a tough time. Having services to get them through those challenging times can lead to better retention rates.

Nontraditional programs have a strong focus on career. Students spend all the time and money on the education and they want to have several job opportunities when they complete their education. They enter programs wanting to enter well paying, well respected, fulfilling jobs. Having a strong career development center is a great resource for both recruitment and retention. The job placement rate of a college is an important consideration students make when choosing schools.

2.13.   Community-Building

Students who are pursuing programs that are nontraditional to their gender may face opposition from their families or may face a difficult time adjusting to classes. They may require someone with whom they can talk and share their struggles. Schools made efforts to create a network of nontraditional students so that they can support each other through their struggles.

2.14.   Work-Life Balance

One of the ways that the colleges seem to be responding to the labor market is by providing evening and morning classes. Such classes allow a flexible schedule for students who have to work, and/or support their family without disrupting their lives. It allows students to enhance their skills in the field in which that they are interested.

3. Inventory of best practices

- Use traditional media for outreach and to educate people of career opportunities in nontraditional occupations.
- Use images of nontraditional students in communication materials to break down barriers of gender stereotypes.
- Work with Girls Scouts or similar organizations. It can be a way to inspire girls at a young age, help them develop interest in the field of technology and provide opportunities to nurture the interest.
- Increase the visibility of alum success stories. Utilize them as role models, engage them in talk programs, feature them in communication material or involve them in mentorship programs.
- Provide support in the application process. Answer prospective students' queries promptly. Use avenues such as Open house, Group chat, Facebook Live, etc.
- Use research tools and technology to showcase the opportunities in nontraditional fields.
- Ensure commitment for recruiting and retaining nontraditional students from leadership and buy-in from administrative staff and faculty.
- Subscribe to services like National Research Center for College and University Admissions (NRCCUA).
- Encourage students to join nontraditional programs by informing them of the opportunities.
- Recruit internally to increase the number of students pursuing nontraditional programs.
- Get everybody on board and on the same page about the school's vision for nontraditional students, challenges and best practices.
- Offer flexible schedule for classes (evening, night classes, online courses), for services (online tutoring) and advising (online advising).
- Form articulation agreements with four year institutions.
- Arrange for concurrent enrollment programs with high schools.
- Provide services like financial assistance, access to resources, child care, etc.
- Provide tutoring, mentoring opportunities for nontraditional students.
- Develop strong academic and career advising. Provide individualized counselling.
- Focus on the way ahead (goals) - focus on graduation and career opportunities.
- Develop early warning systems for students who are not performing well and provide them with services so they can pick themselves up and avoiding falling through the cracks.
- Prepare students by offering internship opportunities or hands on activities.
- Build relationships with community organization to strengthen outreach.
- Build relationships with the business community for technical assistance and other support.
- Partner with organizations that support nontraditional students.
- Form a diverse faculty.
- Prepare teachers and staff to address unconscious bias, and understand the unique challenges of nontraditional students.

- Set expectations for faculty. Faculty should be committed to, and supportive of the nontraditional students.
- Identify focal points for nontraditional students and at the same time mainstream responsibility for recruitment and retention.
- Secure additional internal and external funding to advance the mission of increasing recruitment and retention of nontraditional students.
- Evaluate, Evaluate, Evaluate. Collect data and use the data to inform your quality assurance efforts.

Appendices

1. Preliminary Survey Questions

1. Please enter the information indicated below.

By entering my personal information, I consent to receive email communications from the survey author's organization based on the information collected.

First Name: _____

Last Name: _____

Company Name: _____

Work Phone: _____

Email Address: _____
emailaddress@xyz.com

Address 1: _____

Address 2: _____

City: _____

State/Province (US/Canada): -- Select a state -- ▼

Postal Code: _____

2. What CTE programs does your institution provide? Under which occupational cluster do the programs fall?

☐ Agriculture, Food & Natural Resources

☐ Architecture & Construction

☐ Arts, Audio/Video Technology & Communications

☐ Business Management & Administration

☐ Education & Training

☐ Health Science

☐ Hospitality & Tourism

☐ Human Services

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- ☐ Finance

- ☐ Information Technology

- ☐ Law, Public Safety, Corrections & Security

- ☐ Manufacturing

- ☐ Marketing

- ☐ Science, Technology, Engineering & Mathematics

- ☐ Transportation, Distribution & Logistics

- ☐ Other [＿＿＿＿＿＿＿＿＿]

3. Which of the following programs attract the most nontraditional students (students who are pursuing occupations that are nontraditional for their gender)?
For women

- ☐ Agriculture, Food & Natural Resources

- ☐ Architecture & Construction

- ☐ Arts, Audio/Video Technology & Communications

- ☐ Business Management & Administration

- ☐ Health Science

- ☐ Hospitality & Tourism

- ☐ Human Services

- ☐ Finance

- ☐ Information Technology

- ☐ Law, Public Safety, Corrections & Security

- ☐ Manufacturing

- ☐ Marketing

- ☐ Science, Technology, Engineering & Mathematics

- ☐ Transportation, Distribution & Logistics

- ☐ Other [＿＿＿＿＿＿＿＿＿]

4. For men

- ☐   Arts, Audio/Video Technology & Communications
- ☐   Business Management & Administration
- ☐   Education & Training
- ☐   Finance
- ☐   Health Science
- ☐   Hospitality & Tourism
- ☐   Human Services
- ☐   Law, Public Safety, Corrections & Security
- ☐   Manufacturing
- ☐   Marketing
- ☐   Other [_____]

5. Do most of your students come from the same geographic area as your institution?
- ○   Yes
- ○   No

6. If No, Where do your students mostly come from?
- ☐   Capital District
- ☐   Central NY
- ☐   Finger Lakes
- ☐   Hudson Valley
- ☐   Long Island
- ☐   Mohawk Valley
- ☐   New York City
- ☐   North Country
- ☐   Southern Tier
- ☐   Western NY

☐ Out of State
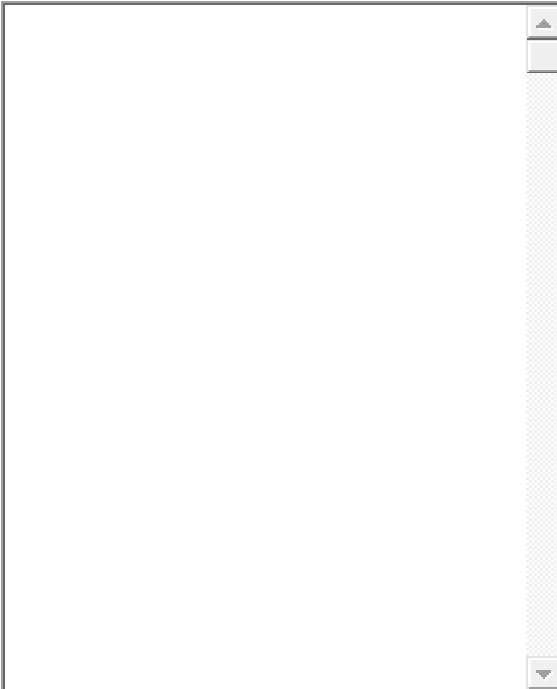
☐ Other [   ]

7. Do you think your geographic location gives your institution an advantage in recruiting nontraditional students?
Please provide an explanation below.

○ Yes

○ No

Comment:

[text box]

500 characters left.

8. What assets, resources and advantages does your environment offer your students? (Employment rates; Partnership; Academic quality/ reputation; Promotion; Price)

1000 characters left.

9. Are there any factors that hinder your ability to attract your students to your institution/area? (Employment rates; Academic quality/ reputation; Inability to market; Cost of living, Tuition)

1000 characters left.

Thank you for your input. We look forward to speaking with you soon.

2. Interview Questions

1) What challenges did you face in recruiting the nontraditional student community?
2) What strategies did you use to overcome those challenges in recruiting nontraditional students? (Fairs/ on campus recruiting events/ off campus recruiting events/ social media marketing)
3) Did you have a communication plan?
4) Have you used social media as a strategy in recruitment and retention? How has that worked for your particular school? Helpful or unhelpful? How much resource did you spend on this?
5) Do you think that your environment/location was helpful or unhelpful in recruiting students? How and why?
   a. What did you do to overcome this challenge, if it is/was unhelpful?
   b. If the environment was helpful, what advice would you give other schools in replicating the environment of your school?
6) What (if any) organizational or structural changes did you make in order to improve recruitment of nontraditional students? (Hire new staff, implement new strategic plan, community partnership)
   a. What other initiatives have you instituted?
7) What challenges did you face in retaining the nontraditional student community?
8) What strategies did you use to overcome those challenges in retaining nontraditional students? (working with faculty to address unconscious bias, tutoring and mentoring program, dedicated staff for nontraditional students)
9) How were you able to harness support from your professors in making sure that educators are truly dedicated to the initiative of supporting nontraditional students and creating a positive classroom environment?
10) What strategies did you utilize to harness support from your community/business/family members of nontraditional students?
11) What do you believe are the best practices that contributed to your success?
12) If any institution wants to replicate your success, what would your advice be?

3. Interview Protocols

- The interview was recorded.
- Consent for recording was taken from the participants beforehand.
- Participants were provided an option of sharing information off the record.
- They also had the option of not answering the questions
- The participants were asked to fill out the preliminary survey before the interview

For Further Information about the Nontraditional Employment & Training (NET) Program, please visit the NET program website at www.netprogram.org or contact Dina Refki at 518.442.5127 and at Drefki@albany.edu