Achieving Diversity through High School Vocational Programs

Les E. Norin

Davenport Fire Department

Davenport, IA

2

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of others.

~· 1	
Signed:	

Les E. Norin

Abstract

The Davenport Fire Department has a long history of struggling to create and maintain a diverse workforce. Current policies and programs are failing to recruit a more diverse applicant pool. The problem is that despite continued efforts to increase the diversity of the organization, the Davenport Fire Department has not adequately explored the possibility of establishing a high school vocational program to provide opportunities for Davenport Public School District children across all demographics to prepare to serve their community as a firefighter. The purpose of this applied research project (ARP) is to explore the feasibility of establishing a vocational education program to provide the opportunity for all students in the Davenport Public School District an opportunity to prepare for a career in the fire service. Descriptive research was used to answer the following questions:

- 1) What challenges and opportunities exist in adding a high school vocational program to the Davenport Public School District curriculum?
- 2) What similar types of programs are offered in other communities?
- 3) How can the program offer greater opportunities for minorities in the fire service?
- 4) What organizations would serve as partners or stakeholders in the program?
- 5) What other implication will the program have on the Davenport Fire Department?

The procedures used included a literature review of available materials utilizing the National Fire Academy Learning Resource Center (LRC) as well as the World Wide Web. Similar programs were studied for structure, intended audience, and procedures. Additional data was obtained by utilizing two survey tools. The first survey was used to collect data from current members of the

Davenport Fire Department. Another survey was sent to members of the National Society of Executive Fire Officers (NSEFO) to obtain data from external organizations. The results were that programs targeting high school students were common in the fire service, and deemed successful in boosting recruitment, including the recruitment of minorities. The recommendation was for the Davenport Fire Department to partner with the Davenport Public School District to provide a vocational education program to all Davenport students.

Table of Contents

I	Page
Certification Statement	.2
Abstract	.3
Table of Contents	5
ntroduction	6
Background and Significance	7
iterature Review	12
Procedures	16
Results	19
Discussion	24
Recommendations	28
Reference List	31
Appendices	
Appendix A	33
Appendix B	38

Achieving Diversity through High School Vocational Programs

The City of Davenport, similar to countless communities throughout the country, believes recruiting and maintaining a diverse workforce is of high importance to our citizens and our leaders. However, despite the commitment to this goal, the Davenport Fire Department (DFD) has struggled in their efforts to recruit and hire a workforce representative of the community it serves. Failing to meet this expectation of the community threatens the effectiveness and capability of the fire department to best serve the community. Maintaining trust and credibility within a diverse community will be challenging for the fire department without a solution to this problem

While the DFD has been successful in recruiting and maintaining female employees, all other demographics are represented far below that of the community. Due to retirements, transfers, or other separations where minorities have left the department, the DFD is overall less diverse today than it was when the problem of diversity was first considered. Current initiatives to increase the diversity of the candidate pool have failed to increase the number of minority applicants, and those who apply are not proceeding past the civil service testing process to make the eligibility list which is required to be considered for employment. The problem is that despite continued efforts to increase the diversity of the organization, the Davenport Fire Department has not adequately explored the possibility of establishing a high school vocational program to provide opportunities for Davenport Public School District children across all demographics to prepare to serve their community as a firefighter.

The purpose of this applied research project (ARP) is to explore the feasibility of establishing a vocational education program to provide the opportunity for all students in the Davenport Public School District an opportunity to prepare for a career in the fire service.

Descriptive research methods were used to answer the following research questions:

- 6) What challenges and opportunities exist in adding a high school vocational program to the Davenport Public School District curriculum?
- 7) What similar types of programs are offered in other communities?
- 8) How can the program offer greater opportunities for minorities in the fire service?
- 9) What organizations would serve as partners or stakeholders in the program?
- 10) What other implication will the program have on the Davenport Fire Department?

BACKGROUND AND SIGNIFICANCE

City and Region

The City of Davenport is located in eastern Iowa along the banks of the Mississippi River. The city is bordered on the south by the river in one of the few locations where the Mississippi runs east to west. The interstate 80 corridor runs along the northern border. A moderately sized community, Davenport has a population of 99,685 (United States Census Bureau, 2010, p. 1) living in approximately 66 square miles. The city is primarily urban, although there are areas of agriculture within the city limits along the northern and western borders.

Davenport, the county seat of Scott County, is the largest city in the county and the third largest city in Iowa behind Cedar Rapids and capital city of Des Moines. Incorporated in 1836,

the city is governed by 10 aldermen (8 ward and 2 at-large) and a Mayor. A city administrator handles the day to day administration of the city. Davenport employs 814 full time employees who provide a broad range of city services to residents and visitors. The fiscal year 2012 budget for the city is 203 million dollars with 30% of all funds and 80% of the general fund coming from property taxes. Davenport is also the largest city in the region known as the Quad Cities metropolitan area. This area includes cities in two states including Davenport and Bettendorf in Iowa and Rock Island and Moline in Illinois with a combined population of approximately 420,000 (Greater Quad City Region, 2010, p. 1) residents. The remainder of Scott County except Bettendorf, with a population 32,217, is comprised of rural communities.

Fire Department

Organized in 1882, the DFD has proudly served the city for over 129 years and is the only completely career fire department in Scott County. Currently the DFD staffs eight engine companies, three truck companies, and two district chiefs' vehicles with an authorized staff of 139 uniformed members, 2 civilian secretaries, and a civilian emergency medical services (EMS) coordinator. Last year the department responded to over 19,000 calls for service including fires, emergency medical services, rescues, hazardous materials incidents, and other calls for service. In addition to the regularly staffed apparatus, the DFD also maintains several specialized units such as a heavy rescue unit, hazardous materials unit, rescue boats, and other support vehicles. The organizational structure of the department is the fire chief directing assistant chiefs, 6 district chiefs, 11 captains, 22 lieutenants, 33 engineers, and 63 firefighters. The Davenport Fire Department is currently an Insurance Services Office (ISO) class three and last year received accreditation from the Center for Public Safety Excellence (CPSE).

Demographics

According to the 2010 census, Davenport was populated by residents representing five different races at the following populations: White 80.7%, Black or African American 10.8%, Hispanic or Latino 7.3%, Asian 2.2%, and American Indian 0.4% (United States Census Bureau, 2010, p. 1). The current composite of the city has remained relatively constant for the last 30 years with the exception of a moderate drop in the population of Whites from 85.5%, an increase in the Hispanic population from 3%, and the Asian population from less than 1%. When comparing Davenport to the rest of Scott County, however, Davenport has a significantly more diverse population than the rest of the county. In the next two largest cities in the county, Bettendorf and Eldridge, the census shows the White population 91.9% and 96.8% respectively, and the diversity of the population continues to decrease with the size of the community. Population projections for the next ten to twenty years indicate a steady African American population with continued growth of the Asian and Hispanic populations.

Like many fire departments, the DFD is comprised of a majority of White males. The current workplace demographics include 133 males (95.7%), 6 females (4.3%), 132 Whites (94.9%), 4 Hispanics (2.9%), 3 American Indians (2.2%), and 0 African American or Asian (0%). While the current demographics represent a significant improvement from 1980, when the department had only one female and one African American, the DFD has a great deal more headway to make to achieve a workforce which represents the community demographics. *History*

The Davenport Fire Department was the first fire department in Iowa to hire a female firefighter in the 1970's and during that time also employed the first African American firefighter in the DFD. Both of these employees enjoyed long and successful careers in Davenport, both progressing through the ranks to lieutenant prior to their retirements. While

trendsetting at the time, the city soon found the need to place more emphasis on the recruitment of diverse workforce. In the early 1980's the city established a recruitment task force to study and recommend changes or initiatives to encourage a more representative workforce.

Unfortunately, due to budget constraints in the difficult financial times to follow, the task force was disbanded and despite more recent attempts to reestablish this committee, no similar such task force currently exists.

This lack of success in diversification has not gone unnoticed in the community. Recent surveys of citizens continue to show a great desire for diversity in the fire department. Many unrepresented minorities feel underserved by a predominantly white male workforce who may not adequately understand the unique values, perspectives, and culture of their specific demographic. Leaders in the minority community echo this frustration at town hall meetings and other forums where diversity in city employment is discussed, particularly among the African American leaders who question how the fire department has no representation of their demographic. The public perception of many is that the department is insensitive to the minority community.

Despite this demand for improvement in diversity within the DFD, there has been little change in the methods and polices used in recruiting and hiring of minorities. The current city administrative policy on recruitment has not been updated since January of 2000 and reads:

Recruiting efforts for all vacancies will be planned and carried out in a manner that assures open competition. Job announcements of all vacant or newly created positions will be posted in the City Human Resources Department and distributed to all City departments for posting. Announcements for all entry level positions will be distributed to community agencies and listed with the Iowa Workforce Development Center. In

addition, newspapers, professional journals and the internet will be used for recruitment as appropriate to the occupational field and employment market. Promotional announcements will be posted in city departments only. (City of Davenport, 2000, p. 1)

In addition to these postings and notifications, the human resources department does utilize fire department staff to attend job fair or career day style events in an effort to target potential minority candidates. These measures have demonstrated little success in increasing the diversity of the applicant pool.

Significance

Lack of diversity continues to be a central problem for the Davenport Fire Department, and improvement will be essential in maintaining credibility with the community served. Given the lack of success in current recruitment initiatives, it is important to consider alternative programs that could increase the diversity of the applicant pool and subsequently the diversity of the fire department. One such alternative program would be to establish a vocational education program within the Davenport Public School District to provide all students in the community the opportunity for exposure to the fire service as a career, as well as begin a career path towards employment in the fire service.

Descriptive research will be used to identify the challenges, opportunities, and potential benefits to the implementation of a high school vocational education program. By increasing the diversity of the fire department, a great deal of credibility is achieved within the community, as well as insight into responding to emergencies involving minorities. In addition, this type of program would serve to create a culture of education and career development with the establishment of a career path to employment in the fire service. This research is relevant to the Executive Fire Officer Program (EFOP) as it relates to the United States Fire Administration

(USFA) goals to "Improve the fire and emergency services' capability for response to and recovery from all hazards" and to "Improve the fire and emergency services' professional status" (United States Fire Administration, 2011, p. II-2).

Literature Review

The purpose of the literature review is to examine the results of published information relevant to the problem statement. For the purpose of this (ARP), resources were obtained through the Learning Resource Center (LRC) at the National Fire Academy (NFA), the City of Davenport, and searches conducted on the World Wide Web. Literature relevant to existing high school vocational programs will be examined with attention to how these programs can enhance the diversity of the Davenport Fire Department.

Definition

Merriam-Webster Dictionary defines vocational as "of, relating to, or undergoing training in a skill or trade to be pursued as a career" (Merriam-Webster, n.d., p. 1). For the purpose of this paper, this definition serves as a general concept of a variety of similar programs offered throughout the country, which all serve to provide education and skills to those who may aspire to pursue a career in the fire service. Regardless if they are referred to as vocational, cadet, or explorer programs, all of these initiatives are similar in that they target high school age students and provide an exposure and introduction to the fire service while they are likely to be in the phase of life where they are choosing an intended career path.

Origins

The origins of vocational education programs in the United States date back to the 1700's with the establishment of "Technical institutes developed to keep up with the educational demands of new factory and social systems" (Davis, n.d., p. 2). The concept continued to

develop from that time until, as a result of the manufacturing demands of the war effort, passage of the Smith-Hughs Act in 1917; the first major development of vocational programs in the U.S. This act was the first provision for federal funding of vocational education with an initial appropriation of \$1.7 million incrementing to \$7.2 million for 1925-26. In addition, the act also created the federal Board for Vocational Education with membership including the Commissioner of Education, the Secretaries of Commerce, Agriculture, and Labor, and three appointed citizens. (Davis, n.d., p. 3). Continued success of such programs prompted continued government support and further expansion of programs through from the 1980's and 1990's through today through the Perkins Act.

Opportunities for Diversity

This is not the first instance that the potential for a high school vocational program in order to increase diversity has been discussed. In his ARP on diversity in the Davenport Fire Department, Captain Robbie Harris wrote,

It is clear that a well intended, all-encompassing program for minority recruitment is a practical and rational approach to address any mistrust the citizens have toward the fire department. Research has indicated that the Human Resource Director for the City of Davenport and his assistant are open-minded and willing to have the fire department develop a plan and try new and innovative ways of obtaining minority recruits. The approach of programs ranging from an apprenticeship to work study may have important long-term effects on attracting and maintaining a diverse workforce. (Harris, 2005, p. 25)

This suggestion is supported by work of the International Associations of Fire Fighters (IAFF) Diversity Initiative. This initiative is a scientific study to explore methods and

approaches that will improve the diversity of the fire service. This report suggests a cadet or explorer program, similar in nature to a vocational program, and is described as,

Programs vary, but this exposes kids from 8th grade through high school to the career opportunity in the Fire Service. It provides a good career option, advanced preparation opportunities, and extends a personal welcome to disadvantaged kids or to kids from backgrounds that are not part of the traditional recruitment pool. (Fox, Hornick, & Hardin, 2006, p. 19)

The report further suggest that,

This is one of the most effective methods. This method is effective for all Minority Groups and for women. Some of the departments use a Cadet program as their primary recruiting method that minimizes the need to advertise and use other formal methods of identifying candidates.

These statements serve as a strong endorsement for providing this type of opportunities to high school students, and a time when they are likely to be choosing potential career paths.

Much of the success of vocational programs is the ability to draw participants directly from the community. Because of the participants come from the community, there is much greater chance that the participants reflect the diversity of that community. In his ARP analyzing the Pima County Joint Technical Education District program, Robert DiPietro stated,

These programs serve as active recruiting grounds for future firefighters. The programs allow the fire service to cultivate their vocation by developing good sound fire service education at an early age level. The programs tend to draw local residents into the local fire department or district. This allows a community's public service sector to match the diversity of the community's demographics that include active participation by minorities

including women. The fire service programs also acts as a quasi affirmative action program by providing an educational opportunity for minorities to explore a career in the fire service. (DiPietro, n.d., p. 11)

In addition to the high school dynamic, DiPietro also observed,

47)

The literature review indicates many high school fire service programs nationwide in various forms. Many follow the NFPA Firefighter curriculum to certify students to the Firefighter I and II level. Some programs offer an Emergency Technician certification course. Many programs partner with the local post-secondary education facility whether a community or a four year college to provide college credit toward a fire service degree.

As part of an ARP, C. Hadden Culp Jr. of the Prince William County Department of Fire and Rescue in Virgin created a proposal for a high school cadet program. The recommendation was,

As a result of the information obtained in the research, a proposal (Appendix A) for the establishment of a High School Cadet Program based on a partnership between the PWCDFR, the PWCS, and the Prince William County Fire and Rescue Association, has been developed that covers the critical issues discovered.

The proposal recommends that the cadet program be offered to 11th and 12th grade students who are at least 16 years old. For insurance purposes, the student shall be a member of a Prince William County Fire and Rescue company and that they have their own transportation. It is also recommended they maintain a 2.0 GPA and that the student not be on probation with Juvenile Justice through the court services unit. (Culp, 2001, p.

Earlier in the research paper, Culp also observes that there is a related potential benefit to the fire department because of the increased qualifications of recruits who have been through this program. Culp states,

The impact on organizational effectiveness could be significant. Depending on the number of students enrolled in the program, the PWCDFR could capture applicants, both career and volunteer, with a certain degree of "pre-training." This could save on recruitment cost, and improve the number of available applicants. (Culp, 2001, p. 8)

In conducting the literature review for this ARP, it is promising that there are well established programs within the fire service with which the Davenport Fire Department can learn from and use as guidance in the development of a program for the City of Davenport and the Davenport Public School District.

Procedures

Purpose

The purpose of this applied research project is to explore the feasibility of establishing a vocational education program to provide the opportunity for all students in the Davenport Public School District an opportunity to prepare for a career in the fire service. This concept is intended to address a central problem for the Davenport Fire Department; that is the lack of success in recruiting a diverse workforce. This lack of success has created a demand for new ideas in recruitment initiatives, and the DFD has not explored the feasibility of implementing a vocational program as a means of increasing opportunities for minorities to choose a fire service career and successfully compete for employment. The focus of this ARP is to conduct an

analysis of the strengths, weaknesses, opportunities, and threats to the implementation of such program.

In gathering information for this project, descriptive research was utilized to provide background information and examine similar programs in other communities. The LRC at the National Fire Academy was contacted and a literature search was conducted utilizing "adult education", "minorities and diversity in the fire service", and "generations and generational differences" as search criteria. This literature search resulted in ample related resources to provide a sampling of vocational programs offered throughout the country. In addition, information was gathered from the City of Davenport website, as well as other searches utilizing the World Wide Web.

Additional information was obtained by the utilization of two separate survey tools. The surveys were created at the website www.surveymonkey.com to obtain information from both internal and external respondents. The first survey was sent to all 139 members of the Davenport Fire Department and is included in Appendix A. Out of the 139 members, 58 members (42%) responded to the survey. This internal survey was designed to evaluate, in addition to demographic information, the background of DFD members prior to employment. Did they have prior exposure, education, or experience in the fire service prior to employment? Did they attend high school in Davenport or another community? Would they have taken advantage of a vocational fire service program if it had been available?

The second survey was sent out to all 671 members of the National Society of Executive Fire Officers (NSEFO), of which 95 (14%) recipients responded. The NSEFO was chosen based on the reliability of their members to respond to ARP surveys due to the reciprocity among members. This external survey was designed to evaluate what requirements other departments

have to be hired as a firefighter and what types of programs other communities have in place similar to a vocational education program. Do they provide this specifically to high school students or through a local college? Does the fire department participate? How is the program funded? These two surveys combined represent an effort to help answer the research questions for this ARP.

Finally, questionnaires were created and emailed to the Davenport Fire Chief, Assistant Chief of Operations, and Human Resources Director in order to obtain their perspectives on this topic. The following questions were included in this questionnaire: What do you feel have been the strengths of the DFD's current/past minority recruitment efforts, and where do you feel there are opportunities for improvement? What do you feel would be the challenges in implementing a vocational education program through the Davenport Public School District for the fire service? Do you see a potential for such a program to impact diversity? Do you feel there is any other related impact of such program? Do you have any other thoughts that you feel would help me in my work?

Analysis

The analysis of the information obtained originated by comparing the demographic data of the Davenport Fire Department to that of the local community to establish the core problem of a lack of diversity in the DFD in contrast to the community served. Past and current City of Davenport practices and policies were then examined to better understand the current state of diversity and recruitment procedures. Finally, the policies, procedures, and programs of other organizations were studied to provide insight into successful programs for recruitment of a diverse workforce.

Limitations

The results of the surveys conducted have some potential limiting factors. First, not every respondent answered every question asked in the survey. For these responses the assumption was made that the question was not applicable to the respondent, the information was otherwise unavailable, or that the respondent chose not to disclose that particular information. Also, both surveys were designed to be short, as to encourage greater participation. Some level of detail was sacrificed in this decision to keep the survey brief, but a greater response rate to the questions asked was a benefit to the author.

Results

1) What challenges and opportunities exist in adding a high school vocational program to the Davenport Public School District curriculum?

Almost every type of new program will come with associated challenges, and a vocational education program for the fire service is no exception. The most fundamental challenge is the funding of new programs. This is especially true with the current economic realities and the subsequent challenges in public budgets. Research has shown that the challenge of funding has been met in many communities in a variety of ways as diverse as the communities offering similar programs. Results of the external survey show that 66% of the responding communities rely on funding by the school district, 22% have a combination of school district and fire service funding, and 12% have other sources of funding.

An additional challenge was identified by Davenport Fire Chief Lynn Washburn-Livingston.

Chief Washburn stated,

A concern with a vocational program is the perception by some that it would be an easy alternative for credit. Ensuring that serious students enrolled in the program would be a challenge. Certainly it could not be guaranteed that all students would ultimately choose the fire service. I do agree that providing opportunity for exposure to the fire service is the initial goal. However, another goal should be to maximize the results in preparation of candidates for the fire service whether it is in Davenport or another community. Having students in the program that had no intention of pursuing a fire service career could be wasting valuable instructor time and take attention away from those who were serious. How a situation like this could be avoided is a research project by itself. L. Washburn-Livingston (personal communication, March 29th 2012).

A final challenge lies with a provision of Iowa statute that requires candidates for the fire service to be at least 21 years of age. This challenge was identified by former Human Resources Director Jeff Dolan, who stated,

The ultimate approach is to get the high schools involved with an apprenticeship program emphasizing minorities in the fire service. The only problem with that is the State of Iowa has an age limit of 21 for fire service applicants and during the three years after high school, interest or motivation might weaken. (Harris, 2005, p. 19)

The most significant opportunity of such a vocational program lies in the Davenport Fire Department's ability to reach a significant new group of potential applicants to the fire service. When reviewing the results of the internal survey, this opportunity seems to be clear as only 23% of respondents attended the Davenport Public School District. Another 5% attended the

community's only private high school, for a combined 28% of respondents attending high school in the City of Davenport.

Additionally a significant number of respondents (65%) had exposure to the fire service through serving on a volunteer fire department. Through this service, they gained not only exposure to the fire service as a career, but also had an opportunity to gain training and experience to help them be more competitive for fire service jobs. As the City of Davenport does not have any volunteer firefighters, this is an opportunity that simply does not exist today for students living in Davenport and attending Davenport Public Schools.

Finally, when asked if a high school vocational program was available would they have participated, 64% responded definitely yes, 35% responded not sure, and 3% responded definitely not, suggesting a high participation rate among those who are interested in a fire service career.

2) What similar types of programs are offered in other communities?

In reviewing the results of the external survey, there seems to be a good representation of fire department types and sizes. Of the 95 respondents, 70% represented career departments with the remaining 30% representing combination departments. In terms of community size, the largest percentage (40%) of respondents represented communities of less than 50,000 residents, with the remaining respondents divided among larger communities.

It is a significant finding that of these 95 communities, 57% responded that they require some level of fire related training, and 60% require some level of EMS related training to employed as a firefighter in their jurisdiction. In all, 42% of the communities have a program within their school district to fire or EMS related training to students, while 83% responded that they provide

fire or EMS training to potential firefighter candidates. In both cases, the local fire service appears to be active in a variety of means, from providing instructors, equipment, facilities, or ride along opportunities. Only 26% responded that they do not participate in high school program, and 38% did not participate in other programs.

3) How can the program, offer greater opportunities for minorities in the fire service?

The most significant area where a vocational education program offers greater opportunities for minorities lies in the diversity discrepancy between the City of Davenport and the surrounding communities. Of the internal DFD respondents, 72% attended school outside the City of Davenport. When compared to the demographic information from the area, Davenport is by far more diverse than the surrounding communities. A common complaint among minority groups in Davenport is that there is a lack of opportunities for minorities to obtain fire and EMS related training to become more competitive for fire service jobs, and this research supports that assertion. By providing a vocational program within the Davenport Public School District, all students would have equal access to the program, therefore providing a greater opportunity for minorities to compete for employment in the Davenport Fire Department.

4) What organizations would serve as partners or stakeholders in the program?

In addition to the Davenport Fire Department, other organizations would be essential stakeholder or potential partners in a vocational educational program for the fire service.

Obviously the Davenport Public School District would be a vital partner in such a program, and creating this partnership would be a key first step in developing the program. By establishing a partnership with the school district early on, the program could be tailored around the needs of the fire service as well as the school district.

Similarly, the Eastern Iowa Community College (EICC) would be an important potential partner for a vocational program. While the high school setting of the vocational program would serve to provide effective exposure to the fire service and basic job skills, it should be emphasized as the starting point for career development. Many departments require advanced education (college degrees) or additional training (paramedic, etc.) to apply or be competitive for fire service positions. Building a relationship with the EICC to create a seamless transition to further training and education would be a key component in a successful high school vocational program.

Finally key stakeholders in a program of this type would include the City of Davenport

Human Relations Department and local equal opportunity organizations to provide guidance on
the development and administration of the program, as well as assist in recruiting potential
participants.

5) What other implication will the program have on the Davenport Fire Department?

In addition to providing greater opportunities for minorities to gain exposure and training in the fire or EMS services, this type of program also has the potential to have additional benefits to the community and the fire department. First, a program of this nature would increase the department's interaction within the community. This increased interaction would likely lead to greater awareness of the fire service and improved public image of the department. These benefits serve to build upon the credibility and reputation of Davenport fire Department.

Another potential benefit lies in the increased qualification level of the applicant pool, as found in Tucson Arizona,

Career Technical Education programs are designed to prepare high school students for careers in the work force. The program is designed in three components. The first component is to provide a premier technical education in the chosen career path. The Fire Service program provides a curriculum similar to a program delivered to entry-level firefighters. Students can be certified to *Fire Fighter I and II* level using National Fire Protection Association (NFPA) standards (National Fire Protection Association, 2007).

If the DFD is able to recruit candidates with training that meets or exceed National Fire Protection Association standards (NFPA), then less time and resources will need to be allocated in the initial training of new firefighters.

Discussion

The Problem

Cleary diversity remains a significant challenge in the Davenport Fire Department, as well as the fire service in general. In a recent article on fire service diversity, the following observation was made regarding the history of diversity initiatives in the fire service,

Not much has changed over the ensuing three decades. The Bureau of Labor and Statistics' 2010 jobs report indicated that there are about 301,000 firefighters nationwide. Of these, according to the report, 9.6% are Hispanic, 6.4% are African-American, 0.5% are Asian and 3.5% are women. That means approximately 80% of U.S. firefighters are white males – and that diversity still needs to be addressed in the fire service. (Roberts, 2012, p. 39)

While Davenport is slightly ahead of the curve in hiring female firefighters, the DFD falls significantly behind not only local community demographics, but the nationwide demographics

of the fire service as well. Without improvements in the recruitment of a diverse workforce, the divergence of diversity of the DFD in contrast to the community of Davenport is likely to grow as the minority populations continue to grow at a higher pace than the White population.

This trend will create many difficulties for the contemporary fire department in a diverse community. These problems will range from reputation to more tangible barriers in meeting the department's mission. In terms of reputation, the appearance of an organization which is insensitive to ethnic and cultural differences will have challenged credibility and lead to mistrust by the underrepresented populations. This leads to an atmosphere where conflict is driven more by fear and emotions rather than facts and evidence. More tangible barriers include less access to segments of the community for fire prevention activities, language barriers, or a failure to establish the department as part of the community. All of these create significant difficulties in meeting the mission of the fire service.

Conflicting goals

The fire service is not unique in that when recruiting new employees, the organization has an interest in recruiting the most capable and qualified candidate available. In this effort, fire departments will often place a premium on candidates who have previous fire service and EMS training and experience. Often these attributes are even made requirements to apply or be hired on many fire departments. In fact the external survey showed 60% require some such training or education. This interest however doesn't serve the interest of creating diversity.

The fire service is somewhat unique in that there is no clearly defined career path to employment as one finds in many occupations. For instance, someone with the desire to be a lawyer knows that they must complete law school. In Davenport however, the only requirement is a high school diploma or GED, leaving much to the interpretation of candidates to decide what

they can do to become more competitive for the job. If the candidate makes inquires to aid in their development, they are likely to receive a wide variety of advice, but no clear career path, and even with sound advice, there is a lack of opportunity for residents of Davenport to obtain fire service or EMS related training.

In the rural communities surrounding the City of Davenport, the situation is different. With all communities served by volunteer fire departments, who are routinely in need of new volunteers, there is a much greater opportunity to obtain a wide variety of fire service and EMS training and experience at little or no cost. With this training and experience, candidates from the rural areas are more competitive in the fire service job market. The internal survey conducted supports this premise with 72% of respondents attending high school outside of the city. Considering that these other communities are 92% or greater white, the need to create more opportunities for Davenport's more diverse community to gain exposure, training, and experience in the fire service.

A New Concept

The general strategies utilized by the Davenport Fire Department to recruit minorities have remained relatively unchanged for many years. Given the failure of these efforts to create tangible improvements in diversity, the cities minority populations are demanding something different. While a high school vocational program would be a new concept in the City of Davenport, this research has shown it is been an effective tool in other communities. In fact Davenport has a tremendous resource in Fire Captain Robbie Harris, who serves as an instructor for the Area Career Center (ACC) located at the United Township High School in East Moline Illinois. According to their website,

Chartered on May 25, 1966 the United Township Area Vocational Center (former name) was the third center approved in Illinois. Established under a joint agreement with United Township High School District #30, the Area Career Center is physically located on the East Moline Campus and United Township serves as the ACC's fiscal agent. The Area Career Center regularly serves eleventh and twelfth grade students from the following participating school districts; AlWood, Geneseo, Moline, Orion, Riverdale, Rock Island, Rockridge, Sherrard and United Township. (Area Career Center website, n.d.)

This center has long served the area's thriving manufacturing industry, including the world headquarters of John Deere as well as previous home to major equipment manufacturers

International Harvester and Caterpillar, the center now offers a program for the fire service. Mr. Harris stated,

The Area Career Center framework is to help introduce high school students to firefighting. The mission of the Area Career Center is twofold, 1) to provide career and technical education and training for students to be employable and 2) to provide career and technical education and training to meet the needs of business and industry. The Area Career Center has developed a two year program that prepares students for a career as a fire fighter or related Fire Science occupation. During the first year, students will learn the skills needed to prevent and extinguish fires, provide basic emergency medical treatment, and prepare public service information concerning fires and hazardous materials. In the second year course, students will build upon the knowledge and skills gained during the first year as well as learn fire control techniques, fire detection systems, fire prevention practices, communication procedures, and response procedures for injuries, environmental emergencies and hazardous wastes. At the end of the second

year, the student will receive a State of Illinois First Responder Certification. The selection criterion for our program is based on the interest of the student and the class standing he/she has within their school district. Currently, our program does not have any agreement with local colleges to receive collage credit; however, the program has an understanding with area volunteer fire departments that if our students want to join their department, they will receive preferential treatment during their probationary period.

Regarding diversity and how the program aids in increasing fire science education to minority students; the Area Career Center's host school has a predominately Hispanic student body. With the host school having these high numbers of Hispanic students, our program numbers are high in minority students. This helps increase fire service awareness to ethnic groups which could lead to more diversified departments in our surrounding communities. R.J. Harris (personal communication, March 25, 2012)

This center's long term success providing opportunities to the community initially in the private sector, and now experiencing significant minority participation in a public sector field makes it a potential tool for improving diversity in the Davenport Fire Department.

Recommendations

Based on the information gathered for this applied research project (ARP), it seems clear that there is a need to explore new ideas in recruitment of a diverse workforce. By identifying the lack of opportunities for the more diverse populations in the community to gain the exposure, training, and experience that is prevalent in less diverse communities, it seems reasonable to believe that a vocational training program created in the Davenport Public School District has the

potential to reach an entirely new demographic group. A progressive new program such as this could also serve to ease the frustration of minority groups that see the department as an organization without opportunity for people of their demographic.

The Davenport Fire Department should work with the Davenport Public School district to create a vocational education program open to all students who attend Davenport schools. In addition to meeting school district academic standards, the coursework should also meet or exceed standards set by the NFPA. To be comprehensive, the program should include didactic learning, as well as opportunities to apply newly learned skills in practical situations. Chief Washburn-Livingston saw this as a key component when she stated,

If such a program were undertaken, it would be beneficial to have an internship or service type of requirement in conjunction with it. That would require students to participate in such activities as ride-alongs [sic], inspections, or public education events, etc.

These types of activities would not only allow practical application of skills, but create an important exposure to the culture of the fire service.

The Davenport Fire Department should also identify qualified members to work within this program as instructors and mentors. There are several potential benefits by utilizing DFD personnel in this capacity. First, mastering a set of knowledge, skills, or abilities to the level necessary to instruct serves as an avenue of career development for the member as well. Increasing responsibility within the fire service requires development of not only knowledge, but communications skills. Instructing helps provide this development. Additionally, by working directly with a more diverse population, the department member becomes more knowledgeable on culture diversity issues. Finally, engaging more DFD members in programs aimed at improving diversity helps to prepare the fire department culture for success in diversification.

In addition to working with the Davenport Public School District, the DFD can work to make this program more innovative by working with the Eastern Iowa Community College to create a clear transition from the high school program to a post-secondary education in EMS or the fire service. The establishment of a dual enrollment agreement, where the vocational student would be granted some college credit while for successfully completing the high school program would and value the program. The EICC would present an opportunity for these students to continue where there high school program left off and continue to become a more qualified and competitive candidate for the fire service.

The research in this ARP has served to identify the continued struggle for diversity within the Davenport Fire Department, and offered up an innovative suggestion as a means for improvement. It is however simply the first step in the process. Additional research and education will need to occur in order to develop a program ready for implantation. This will require commitment and diligent work from members of the DFD to be successful. Fortunately, while the concept may be innovative to Davenport, there are ample areas who administer similar programs to serve as a model, or at least a beginning point for a vocational education program in the Davenport School District.

References

- Area Career Center website. (n.d.). http://uths.net/acc/ACC/about.htm
- City of Davenport. (2000). Administrative policy no. 1.2. Retrieved February 16, 2012, from http://www.cityofdavenportiowa.com/egov/docs/1313586307_865905.pdf
- Culp, Jr., C. H. (2001). *Components for a fire and rescue, high school cadet program*. Retrieved from United States Fire Administration:

 http://www.usfa.fema.gov/pdf/efop/efo32187.pdf
- Davis, J. L. (n.d.). *History of vocational technical education*. Retrieved from http://www.tamu-commerce.edu/cct/history.htm
- DiPietro, R. (n.d.). *Building for the future: Analyzing high school fire service programs*. Emmitsburg, MD: National Fire Academy.
- Fox, K. A., Hornick, C. W., & Hardin, E. (2006). *Achieving and retaining a diverse fire service workforce*. Retrieved from International Association of Fire Fighters:

 http://www.iaff.org/hr/media/IAFF%20Diversity%20Report.pdf
- Greater Quad City Region. (2010). Report builder. Retrieved January 28th, 2011, from http://reportbuilder.greaterqcregion.org/
- Harris, R. J. (2005). *Identifying needs for a diverse workforce within the Davenport Fire Department*. Emmitsburg, MD: National Fire Academy.
- Merriam-Webster. (n.d.). Vocational. Retrieved from http://www.merriam-webster.com/dictionary/vocational
- Roberts, M. R. (2012, February). Turn the heat up. Fire Chief, 56(2), 38-45.
- United States Census Bureau. (2010). State and county quick facts. Retrieved January 28, 2011, from http://quickfacts.census.gov/qfd/states/19/1919000.html

United States Fire Administration. (2011). Executive fire officer program; operational policies and procedures . Retrieved from

http://www.usfa.fema.gov/downloads/pdf/efop_guidelines.pdf

Appendix A

View Summary Browse Responses Filter Responses Crosstab Responses Download Responses Share Responses

Default Report	+ Add Report		
Response Summary		arted Survey:	59 yey:59 (100%)
Page: 1	Total Co	ompleted Surv	/ey.39 (100%)
DownloadCreate Char	rt1. Which category belo	w includes yo	our age?
	answered question		59
	skipped question		0
		Response Percent	Response Count
21-29		22.0%	13
30-39		35.6%	21
40-49		22.0%	13
50 or older		20.3%	12
DownloadCreate Char	rt2. What is your gender	?	
	answered question		58
	skipped question		1
		Response Percent	Response Count
Female		10.3%	6
Male		89.7%	52

DownloadCreate Chart3. Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific islander, or some other race?

	answered question		56
	skipped question		3
		Response Percent	Response Count
White		94.6%	53
Black or African- American		0.0%	0
American Indian or Alaskan Native		5.4%	3
Asian		0.0%	0
Native Hawaiian or other Pacific Islander		0.0%	0
From multiple races		0.0%	0
	rt4. Are you Mexican, M n, Cuban, Cuban-Americ Latino group?		
	answered question		54
	skipped question		5
		Response Percent	Response Count
I am not Spanish, Hispanic, or Latino		98.1%	53

Mexican	1.9%	1
Mexican-American	0.0%	0
Chicano	0.0%	0
Puerto Rican	0.0%	0
Cuban	0.0%	0
Cuban-American	0.0%	0
Some other Spanish, Hispanic, or Latino group	0.0%	0
From multiple Spanish, Hispanic, or Latino groups	0.0%	0

DownloadCreate Chart5. Prior to employment with the Davenport Fire Department what exposure did you have any prior experience with the fire service? (check all that apply)

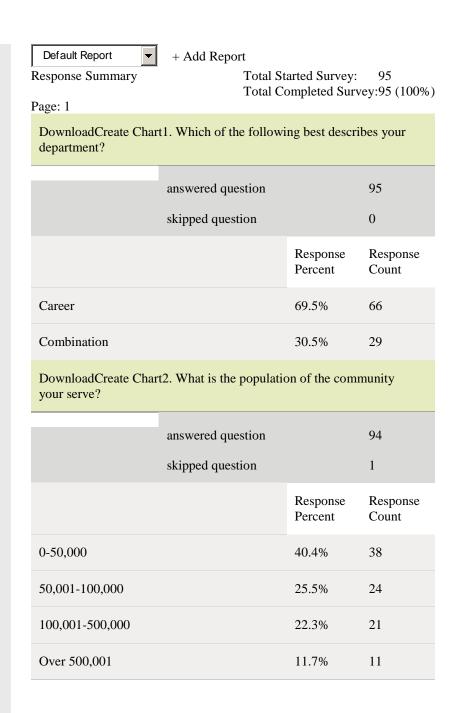
	answered question		49
	skipped question		10
		Response Percent	Response Count
Prior career fire fighter		12.2%	6
Prior volunteer fire fighter		65.3%	32
Prior EMS responder		46.9%	23

College level fire service coursework		12.2%	6
College level EMS coursework		34.7%	17
Other fire service training		20.4%	10
Other EMS training		34.7%	17
DownloadCreate Cha	rt6. What high school did	d you attend?	
	answered question		58
	skipped question		1
		Response Percent	Response Count
Davenport Central		5.2%	3
Davenport North		1.7%	1
Davenport West		15.5%	9
Assumption		5.2%	3
North Scott		15.5%	9
Pleasant Valley		0.0%	0
Other		60.3%	35
Other (please specify) Show Responses			32

DownloadCreate Chart7. If fire and EMS course were available to you as a vocational program in high school, would you have participated in the program? answered question 59 skipped question 0 Response Response Percent Count 36 Definitely yes 61.0% Not sure 35.6% 21 Definitely not 3.4% 2 DownloadCreate Chart8. How important do you feel it is for the Davenport Fire Department to reflect the diversity of the community? answered question 58 skipped question 1 Response Response Percent Count Very important 29.3% 17 Somewhat 29 50.0% important Not important 20.7% 12

Appendix B

View Summary Browse Responses Filter Responses Crosstab Responses Download Responses Share Responses



DownloadCreate Charto be hired as a fire fig	rt3. What training is requester?	uired by your	jurisdiction
	answered question		95
	skipped question		0
		Response Percent	Response Count
None		5.3%	5
High School diploma or GED		75.8%	72
Fire service specific training / certifications		56.8%	54
EMS specific training / certifications		60.0%	57
College degree		2.1%	2
	rt4. Does your communitre or EMS training to hig		
	answered question		95
	skipped question		0
		Response Percent	Response Count
Yes		42.1%	40
No		57.9%	55

DownloadCreate Char program by? (check al	rt5. How does your depa ll that apply)	rtment partici	pate in this
	answered question		46
	skipped question		49
		Response Percent	Response Count
Providing instructors		52.2%	24
Providing equipment		41.3%	19
Providing facilities		26.1%	12
Providing ride- along opportunities		54.3%	25
Do not participate in the program		26.1%	12
DownloadCreate Char	rt6. How is the program	funded?	
	answered question		41
	skipped question		54
		Response Percent	Response Count
Fire department funding		0.0%	0
School district funding		65.9%	27
Combination of		22.0%	9

and school district			
Other		12.2%	5
	t7. Does your local collections to potential fire finds		
	answered question		71
	skipped question		24
		Response Percent	Response Count
Yes		83.1%	59
No		16.9%	12
DownloadCreate Char program by? (check al	rt8. How does your depa ll that apply)	rtment partici	pate in this
	answered question		76
	skipped question		19
		Response Percent	Response Count
Providing instructors		35.5%	27
Providing equipment		26.3%	20
Providing facilities		22.4%	17
Providing ride- along opportunities		52.6%	40

in the program		38.2%	29
DownloadCreate Cl	hart9. How is the program	funded?	
	answered question		65
	skipped question		30
		Response Percent	Response Count
Fire department funding		1.5%	1
College funding		70.8%	46
Combination of Fire Department and college funding		15.4%	10
Other		12.3%	8
	e describe any other type o	of program av	
service, or any simi	prepare potential candidate lar program outside of the community in creating a mo	es for a career fire service th	in the fire at has been
your community to service, or any simi	prepare potential candidate lar program outside of the	es for a career fire service th	in the fire at has been
your community to service, or any simi	prepare potential candidate lar program outside of the community in creating a mo	es for a career fire service th	in the fire at has been ganization?
your community to service, or any simi	prepare potential candidate lar program outside of the community in creating a mo	es for a career fire service th	in the fire lat has been ganization?