CHANGES IN FIRE SERVICE EDUCATION IN WISCONSIN

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Abstract

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Under the Supervision of Dr. Richard A. Rogers, PhD.

At the time of this study, volunteer fire departments had a hard time recruiting and retaining members as people found less time in their lives to volunteer. A group of fire chiefs saw a need for increased training, while an opposing group of chiefs saw an increase in required training as a deterrent to recruitment. The training was traditional classroom with hands-on sessions. Online classroom sessions were an option. However, computer and Internet access was not available for all students. How was a fire training instructor to fit all of this together to develop and maintain a solid training program when opposition to increased hours and online education existed? A review of literature was performed to gather information on the subject matter for this paper. Conclusions and recommendations were drawn from the review of literature as well as from the researcher's 30-year career in the fire service including 16 years as an instructor. Personal experiences of this researcher were the basis of information regarding fire service training, e-mail, computer usage, and reaction of the fire service to changes in training hours. Results of this study revealed that an increase is needed in the hours of minimum fire service training in the State of Wisconsin. They also revealed that online blended courses might be the best course of action to reduce time-related issues such as travel to class.

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CHAPTER 1

INTRODUCTION

Fire Service Training in Wisconsin is handled through the Wisconsin Technical College System and has been since it was mandated to do so in 1940. It was not until 1991 that the state also created a minimum training requirement of 120 hours. Five years later after much critical debate and lobbying, the requirement was lowered to 60 hours. It was believed that 120 hours was too much of a burden on the trainees. It took too much time away from them, the majority of whom were volunteers. The requirement, which was a state statute, did not distinguish between volunteer or paid firefighters. It was the same for both and was based on the training and safety standards created by the National Fire Protection Association, otherwise known as the NFPA (2013).

Courses were a combination of classroom sessions to impart knowledge and hands-on training with demonstration and repetition of skills. A first attempt to resolve these issues was to identify a possible way to introduce online work into the knowledge portion of the courses in order to limit the amount of classroom hours, leaving more time for hands-on skills. This adjustment to the training program had two benefits. First, technology was coming into the fire service at a rapid increase for numerous applications, not just computers; and faculty needed to keep current on the training end of the increase. Second, the customers, in this case the firefighters themselves, had been wanting online training programs.

This researcher first looked at the pros and cons of online education, then looked for the best way to incorporate it into the curriculum. Lastly, this researcher looked at the three providers of curriculum and tested the learning management system (LMS) that they provided to find the best curriculum for the students and the instructors. It was decided that it would be best

to introduce the LMS the same semester that Southwest Tech initiated online registration for courses. The initial phase was designed to be simple to access and complete the work, not overwhelm the students. After three years most of the problems had been solved, and other components needed to be added to the online portion of the curriculum. However, a new challenge to the whole training program had emerged. A group of fire chiefs had decided that the training hours needed to be increased back to the 120-hour format.

Statement of the Problem

At the time of this study, volunteer fire departments had a hard time recruiting and retaining members as people found less time in their lives to volunteer. In Wisconsin a group of fire chiefs had determined that the current minimum training hours were not enough. Some firefighters did not want to take more time because they believed they were already too busy. Other fire chiefs saw an increase in required training as a deterrent to recruitment because people did not want to devote that many hours. The training was a combination of knowledge delivered in the classroom and skills development delivered on the training ground. It would have seemed easy to say that the knowledge portion could be changed to online work to lessen the hours, but that just lessens the hours met. Online work could actually take longer to complete. Students still came to class without e-mail or even a computer. Some fire departments still did not have a computer in the fire station office. How was a fire training instructor to fit all of this together to develop and maintain a solid training program when opposition to increased hours and online education existed?

Purpose of the Study

The purpose of this study was to determine what option or options would be the best course for the fire service training program as related to the following items:

- Hours of training increase
- Lecture change into online time
- Access to computers and the Internet
- Willingness of fire departments to accept changes

Significance of the Study

This study was significant for three reasons. First, results might impact the training of volunteer fire fighters. Second, firefighters would be better prepared to perform their duties. Third, firefighters might be more accepting of the new training format.

Assumptions

The major assumption of this study was that those who wanted to increase the hours of training would prevail. While the proposal had momentum at the time that this research was started, could the momentum be sustained through the legislative process? This action could take two to three years to complete. Questions that remained were as follows:

- Would fire departments stand for any changes to training to the required training hours? There might have been enough departments to push back and keep any changes from happening as a result of organized protests.
- Would fire departments accept more online training as a replacement for the traditional classroom training?

Delimitations of the Study

The delimitations of this study were concerned with the acceptance of the conclusion of the study. The delimitations were as follows:

- Would the results of this study be applicable to full time firefighters?

- Would the results be accepted by those who were responsible for training firefighters?

Method of Approach

A review of literature was performed to gather information on the subject matter for this paper. Fire service periodicals published in Wisconsin by the various fire service entities were used to gather information on increasing the training hours. Articles and interviews were used to obtain information about online and distance learning. Conclusions and recommendations were drawn from the review of literature as well as from the researcher's career interaction as a fire training instructor for 16 years. Personal experiences of this researcher were the basis of information regarding fire service training, e-mail, computer usage, and reaction of the fire service to changes in training hours.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

At the time of this study, firefighting was ever changing; and to keep up with the changes, fire training needed to change with the times. Firefighting was not just putting out fires and rescuing kittens from trees any more. With every new hazard, there was a call to the fire department to handle the problem. Training needs had changed. More hours were needed to be qualified to handle the expanding roles of emergency response. New research from National Institute of Standards and Technology (2010) had shown that changes needed to be made in fighting fires in modern construction. New technology was available to aid in training. At the same time more training was needed, the number of people willing and able to volunteer as firefighters was decreasing. There was also resistance to change in the then current ranks of fire departments. This resistance was not new. It had been there since the inception of the American Fire Service and would always be there. Changes in educational delivery such as interactive television and online learning had made it possible for distance learning to be effective. In spite of this development, fire training still had components that required face-to-face interaction.

The literature reviewed for this study provided the foundation of what fire training was in 2016 and what it could be. Standards and codes set the specifics as to what training would be done and what was required to achieve each level of training. The National Fire Protection Association (NFPA) Standards (2013) were accepted as the guide for fire department operations. The State of Wisconsin had a code that specifically outlined the requirements for fire department operations, safety, and training. The textbooks reviewed were from the leading publishers in the

field. They provided the curriculum for training that was based on the NFPA Standards. They would also be the source for the content of any online curriculum or learning management system. A position paper by Chief Paul Nelson (n.d.) examined the short-comings of the current training. It examined the amount of training hours and if they were effective.

The current training being used by the State of Wisconsin in 2016 was not providing adequate training for all firefighters. The purpose of this review of literature was to examine the training as it was and find solutions to solve the problems that increasing the training requirements would have on volunteers.

Codes and Standards

In order to obtain a view of what fire training was in Wisconsin, the two sets of codes and standards that apply were examined: Safety and Professional Services (SPS) 330, entitled Fire Department Safety and Health Standards, and NFPA 1001, entitled Standard for Professional Firefighter Qualifications. SPS 330 established what the state said were the minimum training criteria for firefighters. NFPA 1001 was referenced by SPS 330. However, SPS 330 had not been updated for more than 10 years. NFPA 1001 was last updated in 2013. There was a current draft of an update to SPS 330, but completion had stalled. Current curriculum being used in the state was based on the current version of NFPA 1001. Those who were not fond of change were standing in the way of the SPS 330 update. SPS 330 stated that a fire department needed to have a safety program and a training program. There was no way to have one without the other. Each supported the other. Required training hours were set for structural firefighting. SPS 330 also assigned the role of training to the Wisconsin Technical College System. Initial and certification training was provided through it. In-house training to maintain skills was to be done by the fire departments. What constituted the levels of firefighter training was established in NFPA 1001.

Textbook Evaluation

Three textbook companies published firefighting textbooks: Jones and Bartlett (International Association, 2012), Delmar-Cengage (2009), and the International Fire Service Training Association (IFSTA) (International Fire, 2013). The textbooks followed NFPA 1001 and were updated every time there was an update to NFPA 1001. Shortly after this research began, Delmar-Cengage made the decision not to update its textbook and discontinued publishing one. The publishers provided the curriculum packages that went with the textbooks. They included lesson plans, slide shows, workbooks, quizzes, and tests. Each publisher had an online component also. There were parts that were free to use as long as a student was using the textbook. There were slideshows, videos, quizzes, and tests. There were also parts that had a cost with more advanced features as interactive lessons and electronic workbooks.

The purpose of reviewing these textbooks and the accompanying curriculum was to be able to decide which one was to be used. Either one was allowed by the College System Office. The format of each textbook was relatively the same. Both started out with an introduction to the fire service and its history. They proceeded with the basics and progressed through the elements of firefighting with each new part building on the last. They followed the progression of training as laid out in NFPA 1001. The Jones and Bartlett text (International Association, 2012) had more chapters as it split some subjects into separate parts. It had 38 chapters compared to the IFSTA text, which had 24. IFSTA combined several related subjects into larger chapters. Both texts were set up to be used for Firefighter I and Firefighter II training. Each also contained Hazardous Materials Awareness and Operations Level chapters. This training was required to complete the Firefighter I level. The curriculum packages were comparable with lesson plans and slide shows for each lesson that could be modified to fit one's needs.

Learning Management Systems

There were many learning management systems, and in 2016 Blackboard was being used at Southwest Wisconsin Technical College, this researcher's place of employment. It was scheduled to be replaced by the next school year (2017). As stated earlier, each publisher had its own online component to the curriculum package. Both were on the Moodle LMS platform and worked nearly the same. Both had free content that was there to be used as long as the textbooks and curriculum were being used. Students had to create an account for themselves and log in to view and complete their assignments.

The Jones and Bartlett (International Association, 2012) system was a bit more difficult for the instructor. Instructors had to create the entire course each time they used the system. The International Fire Service Training Association (IFSTA) (2013) system was created in advance of the class and a template was made. The work was done by IFSTA, and the courses were made based on the syllabus provided to them. When another class section was needed, the template was copied. Both systems had an auto-correct feature, and students would know the score as soon as they were finished with quizzes and tests. The Jones and Bartlett system (International Association, 2012) sent the instructor the grade results, and the instructor had to enter them into the gradebook. The IFSTA system corrected, notified the student, and then recorded the grade into the gradebook.

Both systems had enhanced products that added to the free products. There was a cost to them based on the products that were chosen. The cost ranged from $65 to $100. It was not a prohibitive amount. Like the free products, there were some that automatically graded and posted to the gradebook, and some the instructor had to grade.

The interactive course was part of the enhanced products. This feature could be used to replace the lecture portions of a course in order to reduce the face-to-face time, therefore, reducing the number of meetings and travel time. The interactive lessons used a combination of slides, videos, reading, and questions to work through the subject matter. The student had to complete all of the activities on the page before proceeding to the next page. There were questions at the end of each major point for the student to answer. A correct answer advanced to the next page while an incorrect answer took the student back to the page where the answer could be found. It would go back until the student got the correct answer. The lessons were self-paced, but the average student would take about as much time as a three-hour class period.

The online workbook was also part of the enhanced products. The workbook was the same format as if the student were to purchase a printed copy. The workbook drove the student to the textbook to find the answers to vocabulary and short answer questions. The vocabulary was key to the lessons as the fire service was terminology heavy.

Case Study of Training Requirements

The paper by Chief Paul Nelson (n.d.) made the case for a change in fire training in Wisconsin. Chief Nelson was an advocate for this change before he wrote the paper and was instrumental in getting the conversation on change started. The paper along with the works of others, brought the conversation to the top of the list. Chief Nelson conducted research inside Wisconsin on the training that fire departments required versus what was actually required by the state as a minimum. He also gathered the same information from other states to make a comparison. The paper compared the state training program to the national training standard, NFPA 1001. While the training program was based on this standard, the Entry Level Training required by the state, did not fully meet the requirements of the national standard. Chief Nelson

also cited various articles that pointed out that firefighting was more than responding to house fires and spraying water. Other statistics gathered showed that volunteers in some states were not required to receive any training at all, and the state left it up to the fire department to decide on the level of training required. Conversely, there were other states that required certification to Firefighter I in a set time frame. The other statistics that were gathered had to do with time commitment and costs of classes (*Evaluation of Minimum,* n.d.).

Chief Nelson referenced reports from the National Institute for Safety and Health on firefighter fatalities in Wisconsin. The conclusion of both reports determined that a lack of training was a huge factor in the deaths of firefighters. The lack of training was from firefighters all the way up the chain of command to the chief (Nelson, n.d.).

Persistence in Online Learning

In the experience of this researcher, the number of online courses that colleges and universities offered had increased exponentially in the 10 years from 2006-2016. Hart did a review of literature that addressed online learning and persistence (2012). Online courses had become major parts of programs, or the whole program was online. A problem with student persistence had developed in the United States and internationally. Students who did not persist in an online course did not persist in the entire program. There was some difficulty in identifying those students that were at risk. There was a need to find out what the barriers were to persisting in an online class. There was also a need to identify what made students persist. The main problem in doing so was that there was a terminology issue with what persistence was defined as due to its being used to also describe program completion. For the purposes of the study, persistence was online course completion. Attrition was withdrawal from an online course.

The results showed that those who persisted had a solid support network at home and college, had self-motivation and high goal attainment, and got quality interaction and feedback from the instructor and other students in the course. It also identified that those who were closer to graduation and had a higher grade point average also had a determination to persist. Those who did not persist lacked computer skills, were first or second year students, had difficulty accessing resources, were less engaged and isolated from the other students and instructor, were poor communicators, and had outside issues and influences in their lives that interfered with college (Hart, 2012).

Summary

Codes and standards were the backbone of fire training in Wisconsin as they outlined the requirements for training. Textbooks were based on the standards and added substance to the curriculum by providing best practices in meeting the standards. Learning Management Systems were the online learning platforms that made it possible to deliver classes online. The case study of training requirements indicated a lack of training hours when comparing Wisconsin to other states. The factors related to persistence in online learning should be considered when developing an online course. A summary of this review of literature, conclusions, and recommendations were developed and placed in Chapter 3.

CHAPTER 3

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The literature reviewed for this research contributed to this work by establishing foundations for the following five items: the current fire service training requirements in the State of Wisconsin in 2016, textbooks and curriculum available, online learning management systems and training resources, the case for change in training, and the pitfalls of online learning.

The research done by Chief Paul Nelson could have been more in-depth in regards to the line of duty deaths that were referenced just briefly (Nelson, n.d.). The National Institute for Occupational Safety and Health (NIOSH) reports were full of exact facts regarding the lack of training for the departments involved in those incidents. While he did make a good case with other articles written by some of the most popular pontificators in the fire service, there was more to be taken from those two reports to show that a lack of training could lead to disaster.

The research done on online persistence was affected by inconsistencies in the data that was gathered due to a misinterpretation of the definition of persistence as well as how it was applied to the academic life of the students. Persistence was being used to define completing the online course as well as completing the program in which the student was enrolled. For the purposes of that particular study, persistence was defined as completing the program. This created extra work for Hart (2012) and may have skewed the results. However, it did not affect the information gathered on why students persist and why they drop out.

Training was central to any job and was most important in the safety and well-being of firefighters. How that was accomplished in the future was going to involve more time commitment on the part of the student. They would have to be committed and take ownership of

their work. It would also involve some type of distance or online learning as the educational landscape changes with the demands of the student.

Conclusions

It would be very easy to draw some very quick conclusions from the research and just decide that training should change and online was the way to go. There was more to it than just that. Timing was everything, and it was not always synchronized the way one would like it to be. This research started out as a project and quickly became a position to be taken that had a project tied to it. The timing of the whole study did not move continuously as developing a blended online Entry Level Firefighter course was delayed for several reasons; limiting the data that could be obtained from running the course. The push for change was met with heavy resistance as some in the fire and EMS community pushed back siting training as being the problem with recruitment and retention. Delays in conducting a quality review also made it difficult to obtain research materials from the review survey. This did not mean that there was insufficient data to be reviewed. It meant that there will be more research later. The state legislature also decided to take on the question of training of fire and EMS departments to see if it could find a solution to issues regarding training, recruitment, and retention. Government involvement often caused additional delays, so results were not expected any time soon.

In respect to the National Fire Protection Association (NFPA) Standards and Wisconsin Department of Safety and Professional Services 330 (SPS 330), the fact that NFPA had updated its standards while the State had not changed SPS 330 in 18 years indicates a problem with training. The current draft of SPS 330 was sitting on the desk of the department head, held up because of some people who were quite possibly afraid that they might actually be required to do some training themselves. The Department of Safety and Professional Services (DSPS) did not

think that it should make any changes unless there was what it perceived as a need for change. This is quite arrogant on the part of DSPS as they were not firefighters and did not do any of the training. The statute needed to reflect what was current due to the fact that it was what will be held up as the standard in a court of law if there was any litigation against a department or individual for any wrong-doing. Representatives from DSPS testified to the legislative committee and made no mention of the drafted update and avoided the subject of changing SPS 330.

The textbooks and curriculum presented another hurdle. Both texts were good. However, which was best? It was hard to say, and it boils down to which one fits current needs. Personally, this researcher had always felt that IFSTA was the best as it was the standard bearer of fire training. Jones and Bartlett has good material, but this researcher was not as impressed as others are with Jones and Bartlett (International Association, 2012). The decision had been made to stay with IFSTA for textbooks and online materials. It was working with students, and the other instructors were satisfied with it. As long as the state allowed either to be used and provided a syllabus and implementation guide, IFSTA would be the curriculum used.

There was a place for online learning in the fire service. Younger recruits were comfortable with computers and online learning was already part of their lives. The issue was how did instructors quantify hours using technology and equate that with hours required in the classroom? The online Entry Level Firefighter class that was being piloted had more than enough work to compensate for the hours that would normally be face time. Concerns brought forth by others related to how could it be measured and is it maybe too much material. It was being measured by the time it takes to complete a lesson online versus the time it takes for a

lesson face to face. By the way, there was more material in this online class that was being piloted.

What was being overlooked was the fact that if a student had 60 hours of class time, that was only the time they were meeting with the instructor. It did not count any time that they took at home to read the textbook or practice skills on their own. Unless a student only showed up for class and did no other related work outside of class, they would always be putting in more hours than the posted class hours. The classes that had hands-on components would have to have time for that to be done. The rest could be online.

It was already known that all students were not created equal in the way they learn. Even though they were computer savvy, their learning styles, disabilities, and motivational levels would influence their work products. The three students that were enrolled in the online Entry Level Firefighter course reflected this on all levels. One was ahead of the other two, the next was right where he should have been, and the third had not done one single bit of work and would not answer e-mails or calls.

Students in the face-to-face classes had a small amount of online homework that was nowhere near the work in the fully online class. These classes were not quite half done. Some students had not started any work, and others were completely done because they worked ahead.

This instructor would really like the fire chiefs who are calling for online training to have to work on one online lesson. Arrangements were being made to make that possible.

These things also played a part in the persistence of students in online learning. When students get behind, they might never be able to catch up given the amount of work. If they did not just quit, it affected the quality of the work that they did get done because of the rush to

complete it. Those that quit would most likely not be back. Transitioning to online learning in fire service training would take some time and there would be growing pains.

Besides the student issues, there was a cost to the online portion that was not included at this time in the funding matrix between the fire departments and the state. The majority of the chiefs had agreed that the department would pay the bill. It was possible that the college would set up a billing agreement that would allow for billing at the end of the class; and if the student was successful, the department would be billed. If the student failed or quit the class, the student would be billed. The only thing left was having a computer and Internet access. There were still quite a few persons that did not have Internet access or computers. They might have Smart Phones with data packages, but phones cannot be used to access the online class. Most fire departments had computers and Internet access that students could use, and there was always the public library or the college computer lab. As long as all the parties involved committed to making it work, it would happen.

While it looked like it would be easy to convince departments to accept online training, it would be much harder to get them to increase the training hours so that the minimum meets the National Fire Protection Association (NFPA, 2013) Firefighter I training program. There were several issues that were making this difficult to get done. First, a problem with recruitment and training hours had been tied to recruitment and retention problems. Second, those who had already been trained under the current statutory rule feared that they would be required to take more training. Third, in order to get the hours increased, the legislature would have to change the statute to increase the hours.

Recruitment and retention were primarily a problem for volunteer fire departments as there was no shortage of persons wanting to be career firefighters. This was nothing new. There

had always been a struggle to get new firefighters. However, it had become a larger issue as small towns lost businesses that employed locals; and now those people had to leave town to work. This created a shortage of available firefighters during the day. It also stopped some people from even trying to join departments because they believed that they could not help because they were gone during the day. Priorities had also changed. People had always been busy with family, hobbies, and work. In the past, people sacrificed a bit of family and hobby time to be on the fire department because it was for the good of community and in the end good for the family. Now there was a reluctance to sacrifice family and hobby time. Some people joined the department and managed it, and others used it as a reason not to join. Hence, training time was not entirely the issue when it came to retention.

Those who were long-serving members of the department and who had already been training also contributed to the problem by telling new recruits that training really was not worth the time and that the veteran firefighters did not have to do as much training when they were new. The ironic thing is that these were the same people who were the most proud of their department and used the slogan "Professionally Staffed by Volunteers" on coats, shirts, hats, and stickers on the fire trucks. It was a great slogan, but one could not be professional when one did not meet the professional standards. They used the argument that the hours already made it tough on recruits, and increased hours would drive new recruits away from the fire service. This researcher was not saying that the hours did not matter to new recruits; they did. Some would be concerned about the hours, but it did not help that fellow firefighters were telling them that it was too much and that they did not really need it. A constant complaint heard was that these were just volunteers on small departments, and they did not have many calls. They should not be required to train because of a low call volume. The actual truth was that because of a low call

volume, they should train more to keep up their skills. It would be much better if new recruits were encouraged to take training and that the senior members of their departments would help them instead of hinder them. In reality once students got to class and into the swing of things; they soon realized that it would be easier to get certified to the Firefighter I level, and had it done rather than to stretch it out over many years. Part of the reason was that they have no perspective on the time because they had never been to the training before. Training was hardly the problem when it came to recruitment and retention. There were many larger issues that departments need to address to solve their problems with recruitment and retention.

Actually, changing the language of the statute might really be the biggest hurdle. Not only did the fire departments need to be convinced, the legislature had to be. It also had to be ready to make the change. State legislatures had many other items to deal with including ones that were deemed more important that the training hours of firefighters. The legislature was also known not to make any quick moves. Legislators might have to study the problem all over again before they make a decision. No matter what else was going on, the timing for this move had to be right.

The hurdles were contrasted by the reasons the hours should be increased. Life safety was the highest priority and was the most important reason for training. Other major reasons for additional training include the following:

- Increased roles and responsibilities
- Risks for firefighters
- Consistency and similar levels of training of firefighters
- Lower call volume leading to loss of skills

These were only a few issues, but they were the ones that were constantly brought up when discussing training needs.

Safety was the priority, but it was not always. Before there were safety standards and for some time after that, safety took a back seat to bravery and being a hero. Early textbooks for firefighter training had a single chapter on safety. It was No. 19, the last chapter in the book. It was an afterthought; it was just there. Now it was in the front of the book. Why? There were too many firefighters being killed on the job for reasons that were preventable. About 100 firefighters a year lost their lives, mostly because of cardiac arrest, but there were still some that died because of preventable incidents. While 100 was low for the number of firefighters there were in the nation, it was still too high. The focus was no longer just looking at incident safety and firefighting techniques. It included station activities and training safety.

Current studies were finding that many firefighters were dying from cancer from the chemicals to which they were being exposed (National Institute for Occupational, 2016). Part of the reason was because they did not clean gear. It was one of those things that was a badge of courage. Dirty gear meant that a firefighter got in and did the work. It was now known that all the chemicals were being held in the gear and being absorbed into the skin. This was just one thing that has come to the forefront of safety in the fire service.

For 30 years fires have been on the decline while traffic accidents, hazardous materials incidents, technical rescue, and EMS response have increased in frequency. These new responsibilities brought a different safety dynamic and increased safety training required for each additional response a department assumes. All training was tied to safety. Proper training is not just about learning the skills, but learning to do them safely.

Training must also be consistent. The same program should be used throughout the state. Instructors should be cautioned not to deviate from the curriculum or only teach the things that they like to do. The state curriculum had been set up to address this issue and instructors do their best not to deviate from the training. The bigger issue was that there were those who were only trained to the minimum requirement, and then there were those that are certified. Because of the inconsistencies of training in the past, those who were only trained to the minimum standard, may not all be trained the same. Those who were certified were all trained and tested to meet the standard for certification. A chief would know that he could count on those who were certified because they had been trained to a consistent level.

Fire departments were also required to have an in-house training program that continues to hone the skills of every firefighter in the department. This field was not level or equal in any respect. One could compare two fire departments that were ten miles apart, and they were so far apart in their training programs that one would think that one was in a whole other world. Some departments had mandatory training and meeting nights, and they required all members to be there. Others had no requirements and members showed up as they wanted. Members with only the bare minimum of training would suffer without this extra training time. Those who were certified had been drilled to the point of their skills being rote and would suffer less if they did not get the in-house training. This lack of consistency contributed to ineffective operations and created an unsafe work environment. Out of the 50 fire departments with which this instructor works, half of them had quality in-house training. The other half were wasting the time of their firefighters, which might actually drive them away as they realized they were doing nothing to maintain their training level. Certification would lead to consistency in ability and safety.

Since safety was a main theme in training and on the job, this researcher needed to address a comment made earlier in the review of literature. The position paper that was authored by Chief Nelson (n.d.) made a small mention of two incidents that happened in Wisconsin the past five years with fatal outcomes. At each incident, a firefighter died due to injuries suffered during firefighting operations. The incidents were investigated by the National Institute for Occupational Safety and Health (NIOSH, 2016). In each incident it was determined that safety was compromised due to a lack of training. Each report detailed the lack of training that each department had in required classes that are the minimum required levels that would be obtained through training provided at the local technical college or other institution as well as a lack of in-house training provided by the department. These reports should be an eye-opener for any fire chief, but most would dismiss them due to the perception that these types of incidents would never happen to their departments. These incidents coupled with those attitudes was exactly why Wisconsin enacted a statute requiring firefighter minimum training.

Recommendations

This researcher with 30 years of firefighting experience and 16 years in fire service training recommends the following:

- Online blended courses be developed to meet the demand for more flexible class scheduling.
- The minimum hours of training be increased to at least 120 hours with certification to Level I as was the standard in the past.

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