DEVELOPING A PROFESSIONAL PORTFOLIO



National Training Institute

Professional Portfolio Sample Artifacts

This document contains samples of participant-produced artifacts related to the professional portfolio. In many cases, multiple samples are included to provide various interpretations, formats, and content ideas. All samples are used with the permission of the authors.

Special thanks are given to the following NTI participants who created the artifacts and allowed for inclusion in this document:

Geronimo Umali

IBEW Local #48

Portland, Oregon

NECA IBEW Electrical JATC

Jason Armstrong

Local # 191

Northwest Washington Electrical Industry JATC

Jeff Luby

IBEW Local #48

Portland, Oregon

NECA IBEW Electrical JATC

Additional information and resources related to the professional portfolio may be accessed at <u>www.njatc.org</u>. Follow the links to the I-group portfolio resources.



Professional Portfolio

Jeffrey Luby

TRAINING THE NEXT GENERATION OF









Jeffrey Luby • email: <u>iluby@nietc.org</u> • NEITC Portland, Oregon • August 2008

CONTENTS

Introduction	1
Principles of Learning Course 10	2
Elements of Trade Teachin Course 11	ng 3
Planning and Presenting Related Information Course 20	4
Using Instructional Technolog Course 21	5 <u>5</u>
Performance Evaluation Course 30	6
Teaching and Managing in Technical Laboratory Course 32	1 a 7
Using Discuttsion Methods in Instruction Course 41	8
Creating an Active Trainin Environment Course 42	ng 9
Appendix	10



This portfolio is a documentation of my transition from the past, starting with my field experience as an electrician, to the present as a Electrical Trade Instructor. Included in this document is information about my military experience and the most important thing in my life, My Family. It also documents personal interests, goals, and philosophies.

GERONIMO M. UMALI Street Address City, State Zip Phone



A challenging instructor position with the NIETC, where I can proactively use my skills to meet the needs of the Electrical Trade as well as further the success of the IBEW.

QUALIFICATIONS

- Highly skilled electrician
- Experienced in supervising and motivation personnel
- Adaptable and has ability to prioritize multiple tasks
- A quick learner that is highly motivated toward professional and personal growth
- Works effectively independently or as a team member
- Unique ability to be detailed oriented and consistent
- Skilled in the major computer software programs
- Excellent interpersonal, communication, organization and time-manatement skill

CIVILIAN EDUCATION

- 2004 AAS in Inductrial Technology, Portland Community College, Portland, OR
- 1998 Certificate in Uninterruptible Power Systems, Toshiba Factory Training School, Houston, TX
- 1995 General Journeyman, Metro Electrical Training Trust, Portland, OR
- 1982 High School Diploma, Mark Morris High School, Longview, WA

EMPLOYMENT HISTORY

E.C. COMPANY, Portland, OR

Dec 2000 to present



Oct 1995 to Dec 2000



Field Supervisor (Construction Division)

Responsible for supervising various construction projects. Duties include, but not limited to, supervising electricians, filling out Timesheets and daily log, ordering material, developing record drawings, coordinating with Architect, Engineers, and other trades. Updating the project manager of the progress of the construction.

Service Technician (Technical & Services Division)

Responsible for installing, troubleshooting, repairing, and preventive maintenance of electrical equipment for industrial and commercial applications which include Generators and Uninterruptible Power Systems. Additionally supervised numerous small electrical project.

MILITARY EMPLOYMENT HISTORY

NAVAL MOBILE CONSTRUCTION BATTALION 18 U.S. NAVY RESERVE, Fort Lewis, WA

April 2005 to present	Construction Planning & Estimating Specialist
	Plan and Estimate construction projects. Generate Level I, II, and III construction
	schedules using a Computer Based Construction Management software. Create
	Precedence Diagrams.
Oct 2002 to Oct 2003	Platoon Leader
	Executed orders from the Officer in Charge and Assistant OIC. Project leader on
	various construction and/or maintenance projects for the Nave, Army, Marines,
	and Air Force.
Jun 2001 to present	Seabee Military Instructor
Ĩ	Train Seabees on Basic Combat Skills; Chemical, Biological, and Radiological
	Warfare; Seabee Combat Warfare; General Military Training; and Construction
	Electrician Skills.

MILITARY SERVICE SCHOOL

2005 Construction Planning & Estimating, Naval Construction Training Center, Pt. Hueneme, CA
 2004 Advanced Construction Electrician, Naval Construction Training Center, Pt. Hueneme, CA



Available upon request

Jeffrey Luby

Street Address, City, State, Zip Phone Number: Fax: Number: E-Mail:



Objective

A challenging career as an instructor with the NIETC, using **my thirty plus years** of experience to meet the needs of educating the next generation of IBEW electrical workers.

Qualifications

- Highly skilled electrician and project leader
- Experienced manager capable of supervising and motivating personnel
- Adaptable with ability to prioritize multiple tasks
- Detail oriented with estimating and project management background
- Skilled in major PC and Mac software programs
- Quick learner that is motivated toward professional and personal growth

Experience

NIETC Instructor

Full-time Instructor for Inside Electrical Apprenticeship

Project Manager, Large Commercial Projects 2004 - 2007

Profitably managed multiple projects:

The Oregon Clinic, OHSU South Waterfront Tower & Central Utility Plant, Oregon Public Health / DEQ Laboratories, Tri-Met Commuter Rail Maintenance Facility, Beaver Acres School Addition & Remodel, Sherwood High School Addition & Remodel Phases I, II, & III.

Division Manager, Technical & Service 1996 – 2003

- Increased Sales from \$3 Million to \$6.5 Million
- Doubled the number of service electricians working in the department
- Management Council, EC Company

Project Manager

1989 - 1996

2008 - Present

- Estimating, including pc based estimating programs
- Managed Small Commercial, Tenant Improvement, and Industrial Projects

Journeyman Wireman

1980 - 1989

1977 - 1980

- Lead Foreman for many projects including: Farmers Regional Office Building in Vancouver, WA
- Completed the Punchlist for the PacWest Center Office Tower in Portland and remained on-site for the next five years managing Tenant Improvement Projects
- Remained busy and profitable during the tough economy of the 1980's
- Completed Four-Year Apprentice Training 1977 1980. Foreman immediately upon graduation

Apprentice Wireman

Completed Four Year NJATC Apprentice Training

Education

NTI NJATC National Training Institute, UT Knoxville 2007 – 2008

- 2007 Course 10 Principles of Learning & Course 11 Elements of Trade Teaching
- 2008 Course 20 Planning & Presenting & Course 21 Using Instructional Technology

Management Training

1989 - 2003

1969 - 1974

- FMI Improvement of on-site Productivity
- AMA Developing Executive Leadership
- NW CCC Effective Communication for Construction professionals

College & High School

- B.S. Political Science, Portland State university 1974
- High School Graduate, Parkrose 1969

Interests

Family	Enjoy recreation, travel and trying new restaurants
Waterskiing	Slalom Course Skier (recreational level)
Golf	Enjoy golfing with friends and business associates
Reading Enjoy t	echnical journals, religious and fiction books as well as varied periodicals
Hobby	Currently restoring a 1957 Chevrolet pickup truck
Church	Active Member Cornerstone Community Church
Travel	Numerous US States, Canada, Philippines, China, France, England

Career Synopsis for Geronimo Umali

In December of 1995, Geronimo Umali completed his five-year Inside Wireman apprenticeship. He honed his skills as a General Journeyman Electrician working in the Service Department of a local electrical contractor, where he serviced major company accounts. He also supervised numerous small projects further developing his skills, not only as a journeyman electrician, but also as a field supervisor. By December of 2000, Geronimo progressed to become a field supervisor in the construction department of the company where he fine-tuned his supervising and management skills. He supervised dozens of projects including underground utility for a 54-acre shopping mall and the central utility plant for one the most ecologically friendly buildings in Portland, Oregon.

Geronimo joined the U.S. Navy Seabees (Reserve) in December of 1999. As a member of the Naval Mobile Construction Battalion 18, he was given numerous opportunities to evolve to the professional that he is today. He became a Platoon leader in his Detachment in Portland, Oregon in 2002. In 2004, he achieved the title of Advanced Construction Electrician in the U.S. Navy. In 2005, he attended a 3-month course at the Naval Construction Training Center in Port Hueneme, California to become a Construction Planning and Estimating Specialist. As a Seabee Military Instructor, Geronimo taught Basic Combat Skills; Seabee Combat Warfare; Chemical, Biological, and Radiological Defense; and General Military training. He was awarded three Naval and Marine Corp Achievement Medals for superior professional performance. Two of which had direct contributions to the war on terrorism and Operation Iraqi Freedom. Other achievements include the completion of the U.S. Navy Leadership Course and selection to the U.S. Army Warrant Officer Program.

In May of 2007, after his deployment to the Al Anbar Province in Iraq, Geronimo started his career as an Electrical Trade Instructor at the NECA-IBEW Electrical Training Center. He combines the skills he has acquired from both his civilian and military experience to provide the best training for his students.



Career Synopsis for Jeffrey Luby

In January of 2008, Jeffrey Luby accepted the position of full time instructor with the NECA/IBEW Electrical Training Center (NIETC) in Portland, Oregon. Jeff taught EPS-1 as a part-time instructor prior to making the move to full time instructor. He completed his first year of instruction at the NECA/IBEW Training Institute (NTI) at the University of Tennessee in 2007. Currently, he is teaching the first four terms of the National Joint Apprenticeship and Training Committee (NJATC) classes for inside wireman.

Jeff brought over thirty years of experience in the electrical industry to the NI-ETC. Prior to beginning his career as an apprentice wireman in Portland, Oregon with IBEW Local 48, Jeff earned a Bachelor of Science Degree from Portland State University.

After becoming a Journeyman Wireman, he was the lead foreman on several Commercial projects. In 1983, Jeff worked on the construction of a new thirtystory building. He stayed on as the foreman for that project completing the punch-list and warranty work. For the next five years, he managed and worked on tenant improvement in several high-rise buildings in the core area of downtown Portland.

In 1989, Jeff moved from the field to the main office as a project manager. He worked primarily bidding and managing small to medium size commercial, tenant improvement, and health care projects. In 1996, he was promoted to Service Manager. In 2005 Jeff was asked to project manage multi-million dollar commercial projects; which he did successfully until accepting a position at the NIETC.

From 1990 through 2007, Jeff attended many career related classes and seminars. He recently added to his background by completing the OSHA 500 course, receiving certification as an OSHA 10 and OSHA 30 level instructor and certification to teach the Coyne Basic Life Support / First Aid Program.





PORTFOLIO ENTRY -

REFLECTIONS ON YEAR ONE



Reflection is a critical aspect of being an excellent instructor. There are two primary types of reflective practice-*reflection in action* and *reflection on action*. Reflection in Action allows an instructor to critically evaluate actions, activities, and performance while the action is taking place. Reflection on Action takes place following the instructional session. Excellent instructors are constantly reflecting on their own performance, the students' performance, the classroom environment, and other factors. This allows them to take immediate action to maximize the teaching and learning experience or to make decisions that will lead to changes for future application.

ASSIGNMENT

Begin to write notes or observations related to our learning experiences form your Year One courses (Principles of Learning and Elements of Teaching). After you return home next week, organize your work and place it in the Appendix of your portfolio. Review the notes and observations periodically throughout the upcoming year. Use the following questions to guide your thoughts:

1. What were the major topics covered that will have the most impact on your instruction at your JATC?

Adult Learning Styles.

Blooms Taxonomy of Learning

Pygmalion Effect where people perform only as well you expect them to perform

2. How will you apply concepts and skills learned during Year One?

Look for students that are not engaged and see if I can engage them. Use direct questions, Audio-visual presentations, or labs with hands-on lessons to engage them. Try to use the Pygmalion Effect to elevate students.

3. How has you attitude been changed as a result of your participation in Year One?

I was very impressed to by how much today's apprentice training has improved since my own apprenticeship. It was wonderful to receive training on how to instruct and communicate more effectively. I will definitely use some of the techniques learned during year one.

4. What are some possible obstacles or resistance that you may encounter when you apply what have learned at your own JATC?

I do not anticipate any obstacles from others. The Portland JATC is an extremely professional group that is very supportive. My own inability to implement what I learned will be my major obstacle.

5. What are some possible solutions that you may be able to apply to overcome the identified barriers?

Become proactive in applying lessons learned. Implement techniques learned in course 11 that will make me a move effect instructor.

6. What are some resources that you need to use as you implement these new concepts, skills and attitudes?

Review the Lessons in the Instructor Training Manual. Especially remember to facilitate the Pygmalion Effect and make full use of the laws of Primacy and Recency.

Improve skills for writing new Power Point lessons make the lessons have more interesting with more visual impact to help the students stay engaged.



Reflections on Action

What were the major topics covered that will have the most impact on your instruction at my JATC?

Two of the most important topics covered in Year One that made an impact on me were the Learning Theories (Behaviorism, Cognitive Psychology, and Humanism) and the Laws of Learning which include the primary and secondary sets of laws. Understanding the way adults learn will help me prepare lesson plans that will reach my entire audience. The ability to blend together elements from the Learning Theories and primary and secondary Laws of Learning will be one of the key factors in my growth as an Instructor.

How will I apply concepts and skills learned during Year One?

I will work on blending in parts of the three Learning Theories into my instructional time. Learning is a consequence of behavior. An adult who displays a desire to learn in class should be rewarded in order to encourage more desirable behavior The reward can be an appropriate form of praise in the class or a private conversation where I acknowledge their efforts. Incorrect behavior must be recognized and dealt with in a way that will not discourage good behavior in the future. Modeling is a key component of the Cognitive Psychology theory. Adults learn better if they can model what they have just observed. I must fulfill this need by creating practicable hands on experiments that tie related theory to real life application. Humanism states that leaning is need focused. An adult learner is motivated to learn new content when the content fulfills a need. As an Instructor my job is to illustrate the need for the student to understand related theory or concepts in order to apply them in the field. The point must be made that the related materials covered in class have practical application in the installation of electrical systems. The mastery of this ability to connect classroom related knowledge to the way electrical systems work, fulfills the greatest need of the student, the need to become a competent, qualified electrician.

How has my attitude been changed as a result of my participation in Year One?

The approach the professional educators took on implementing the teaching of the subject matter had the biggest impact on my attitude about adult education. The ability to present the material and apply the techniques at the same time, was a great illustration of how the whole process of adult learning works. The ability to create teachable moments during the class sessions with such ease really caught my attention. The use of two way communication during the entire course provided a relaxed atmosphere, I has little to no dirstractions to compete with the learning process. A great transfer of knowledge resulted from this positive, engaging learning environment the educators provided.

What are some possible obstacles or resistance that I may encounter when I apply what I have learned at my own JATC?

I might not be able to implement all of the classroom enhancements that were discussed during Elements of Trade Learning. One enhancement that would be beneficial is taking my current desk arrangement and using the u shape configuration. This may not be practical due to the size of our classrooms and the number of students per session. Introducing more audio/video into instruction time will be a technical challenge for me personally, I need to address this issue so that I will be able to lecture less and conduct illustrated talks more. Overcoming the tempation to stay in my comfort zone and lean on my natural teaching style will be a big challenge. I don't want to alienate any of my students by an unwillingness to connect with them on their level.

What are some possible solutions that I may be able to overcome the identified barrier?

One solution to the desk arrangement is to plan lab and teaching segments together so that half the class is in small groups in the lab discussing the lab assignment while the rest of the students in class can be in a small group discussing how related theory can be applied in the lab. This will cause the group to come together to problem solve and accomplish the desired task. It will allow me to see certain individuals interact with each other, and give some indication of individuals natural strengths and weakness. The technical difficulty of working in more audio/visual materials in to instruction time can be overcome by networking with my Training Director and JATC teaching staff. I can draw upon the experience of the other staff members in incorporating media content that is both stimulating and retatable to electrical trade learning. To prevent my natural cautioustask oriented teaching style from taking over I need to get to know my students. I need to ask a few personal questions to see what stage in life they are. Discover their hobbies and other interests out side of class and the work environment. These few questions, if they are honestly answered, will reveal a lot about what motivates each individual, and their possible learning style. My ability to relate to each individual is a key factor in electrical trade learning. The better I understand how each student comprehends information the better my lesson plans will be. My lesson plans need to cover all the material required to achieve the lesson objectives, but also needs to address delivery methods what will reach the entire class.

What are some resources that I need to use as I implement these new concepts, skills, and attitudes?

I have access to a great local community college that offers basic computer classes. I have quickly discovered the need to improve my basic computer skills in order to help me prepare lesson plans and class related handouts, quizzes, and test. These courses can also be a valuable asset in learning how to use pc based media content to liven up my instruction sessions. I have a few close friends who are career teachers. They are a great resource for class management skills, and how to further implement the accepted Laws of Learning and Learning Theories. They have been a source of great encouragement as I begin the journey of electrical trade instructing.

Elements of Trade Teaching

This section contains my philosophy of Apprenticeship and the steps I take to accomplish the mission of passing on the knowledge and skill that I have learned through education and experience.

- 1. Pick a real life incident related to the subject at hand
- 2. Determine the level of instruction needed
- 3. Organize the teaching material
- 4. Pick the best delivery method
- 5. Introduce the material
- 6. Present the material
- 7. Summarize and Follow up

MY PERSONAL PHILOSOPHY OF APPRENTICESHIP TRAINING

What are the primary purposes of apprenticeship training?

I believe that apprenticeship is the door into one's hidden talents. Apprenticeship training will only facilitate a method or a concept, but it is up to the individual to come up with his or her own ideas to accomplish the mission or goal. Apprenticeship training allows a person to develop into a skilled craftsman.

Who are the primary beneficiaries of apprenticeship training?

I believe that our community benefits form apprenticeship training. An apprentice who develops into a skilled craftsman tends to have a lot of pride in his or her work. A person with a lot pride in the things that he or she does will to a better job than the one that does not.

What is the instructor's role in apprenticeship training?

I believe that the instructor is the coach, the mentor, and the facilitator. He or she has to be prepared to make adjustments help the apprentice achieve his or her goals.

How is apprenticeship training best accomplished?

I believe that having a mindset that your apprentice will take your place in the future will best accomplish apprentice training. When we have taught the apprentices everything we know, we have accomplished our mission as instructors.

How does apprenticeship training benefit the trainee?

I believe that the apprentice learns methods and procedures from many different instructors or journeyman. To me, this benefits the trainee because he or she chooses what works best for him or her.

How does the electrical industry benefit from apprenticeship training?

I believe that top-quality apprenticeship training yields top-quality craftsmen. With topquality craftsmen we get top-quality installations. The electrical industry totally benefits from this.

How does society benefit from apprenticeship training?

I believe that society benefits from apprentice training because the quality of life of apprentices improves as he or she progresses. This improvement affects everyone around that apprentice.

Personal Philosophy Of Apprenticeship Training

What are the primary purposes of apprenticeship training?

I believe that the primary purpose of apprenticeship training is to provide a positive learning environment to allow apprentices the opportunity to build upon their broad general knowledge base with specialized training that focuses on related theory and practices of the electrical industry. This positive learning environment must be provide both in the classroom and at the jobsite. The specialized training learned in the classroom must be relatable to the field so that an apprentice will attach value to the training.

Who are the primary beneficiaries of apprenticeship training?

I believe the primary beneficiaries of apprenticeship training are the individual receiving the training, the contractors investing in the individual, and the electrical industry as a whole. First the individual learns the ability to earn a good sustainable living by becoming a professional trades person through education and on the job experience. The contractor receives a return on their investment in the individual in the form of a professionally trained, certified electrician who can competently install electrical systems to meet and satisfy customer needs. The electrical industry also benefits from this ongoing process by a steady supply of skilled electricians that are able to conduct themselves in a professional manner, who are able to efficiently install suitable electrical installations on time and under budget.

What is the Instructor's role in apprenticeship training?

I believe that the role of the Instructor in apprenticeship training is to link the importance of classroom related instruction to practical application in the field of electrical work. An effective Instructor not only discovers how to motivate each individual to learn the classroom related theories, knowledge, and skills, but also provides a way for the apprentice to apply these skills on a daily basis while performing field work.

How is apprenticeship training best accomplished?

I believe apprenticeship training is best accomplished when all interested parties involved are in agreement on the desired goal to be achieved through trade learning. The highest possible standards of achievement should be expected. The contractor's involved should have an understanding of the importance of investing time and money into apprenticeship training, and have a reasonable list of expectations of the apprentice for their investment. Journeymen as well as Instructors need to understand the importance of their role in training apprentices. Journeymen and Instructors must take the time to mold the behaviors and abilities of the apprentices into attitudes and skills that meet the requirements for successful entry into the field of electrical work. Apprentices must truly develop a sense of accountability and responsibility to the trade. Apprentices must be willing to set their expectations high in order to become the next generation of professionally skilled electricians. When all interested parties are working towards a common goal, the best training is accomplished. How does apprenticeship training benefit the apprentice?

The combination of paid training on the job and low cost related classroom instruction benefit's the apprentice in many ways. The first benefit is the ability to earn a good wage from day one with scheduled raises based on advancement in trade knowledge and skills. The second benefit is the confidence instilled in the apprentice by incorporating technical skills learned in the classroom and mechanical skills learned on the job. As confidence is increased, the apprentice will realize their potential and strive to meet the industry's expectation of a top wage earner in the electrical field. The apprentice's ability to meet expectations by gaining new skills and knowledge as a result of hard work and determination will lead to a sense of accountability toward the electrical industry. This accountability will motivate the apprentice to maintain a life long pursuit of new knowledge skills and attitudes that will keep them at the top of their profession.

How does the electrical industry benefit from apprenticeship training?

I believe the electrical industry benefits from apprenticeship training by the ability to sell our services to our customers. The service we provide to our customers is simply the highest quality of electrical installation by professional contractors, highly skilled electricians, and motivated apprentices. If customers feel that they are getting good value and a return on their investment, they will continue to use our services in increasing measure in the future. This continuing process will attract more highly skilled, and motivated people into the electrical industry. An industry that provides good sustainable living wages and benefits, to those seeking to become skilled craftsmen in the field of electrical work.

How does society benefit from apprenticeship training?

I believe that society benefits from apprenticeship training by everyone involved in the process taking on a sense of ownership. Everyone involved has a part or role to play in apprenticeship training. The customer, contractor, instructor, journeymen, and the apprentice are all key components of trade learning, each of these individuals serves an important part of society as well. Trade learning in itself is a form of community. When the community works together, good results are achieved and everyone has a sense of accomplishment and identity by being involved in the process.



Principles of Learning

This section contains my understanding of E. L. Thorndike's Principles of Learning.

Primary Laws

Law of Readiness: Prepare the learner Law of Exercise: Practice makes perfect Law of Effect: Make learning enjoyable

Secondary Laws

Law of Primacy: Start with the basics Law of Intensity: Make it worth the learner's time Law of Recency: Apply what was learned Title: Fault Currents

Date: February 14, 2008

Primary Delivery Method: Powerpoint, White Board



PRIMARY LAWS

LAW OF READINESS- A person learns best when he or she is ready to learn and can connect previous experiences with new ones.

Interpretation of the Law of Readiness

In order for people to hear what you have to say, you first have to get their attention and arouse their curiosity.

Examples of Activities Performed to Support the Law of Readiness

I started by telling a story about a personal experience as a fresh journeyman taking unnecessary risks and working in an energized electrical panel. The story ends with me shorting the neutral with the "hot" bus. I also reminded them of the dangers of working in the electrical trade and how ignorance could potentially kill you. This triggered a discussion of incidents that the apprentices witnessed or experienced. After the short discussions, I presented the material using the Powerpoint slideshow.

LAW OF EXERCISE- Learning and retention are strengthened if an experience is followed by practice.

Interpretation of the Law of Exercise

Practice makes perfect. The students need to apply their newfound skill.

Examples of Activities Performed to Support the Law of Exercise

After showing the Powerpoint presentation, I showed the class how the formulas for calculating fault currents are used using the white board. I also did a few calculations on the board. From there I gave the class a one-line diagram, which they used to calculate short circuit currents at different points in the electrical system. This gave them the real-life application of the short-circuit calculations. I gave them time to do the calculations.

LAW OF EFFECT- Learning and retention are strengthened if an experience is followed by pleasure and weakened if followed by displeasure

Interpretation of the Law of Effect

People tend to do the things that make them feel good more than the ones that don't.

Examples of Activities Performed to Support the Law of Effect

After the allotted time given to the students to work on the calculations, I calculated the problems on the white board. For each step, I turned to them to help me fill in the different values. This got the whole class involved. At that point, almost everyone was eager to present the answers. This was very satisfying for most of the students because they were actually doing the problems. I only wrote what they told me to write down. Each time they made a mistake, I would jokingly ask if "that was their final answer". This made the whole process more enjoyable and at the same time it somewhat reviewed what was taught earlier. In the end, I felt that the students were satisfied with themselves knowing they learned something new.

SECONDARY LAWS

LAW OF PRIMACY AND RECENCY- Apprentices will remember material presented first and last more than other material.

Interpretation of the Law of Primacy and Recency

A plan should contain the most important information in the beginning and the end.

Examples of Activities Performed to Support the Law of Primacy and Recency

In the beginning of the lesson, I talked about the importance of knowing what the available fault currents are within the different parts of the electrical system. In the end, letting the students actually do the calculations further emphasized the importance of knowing the available fault currents in the system.



LAW OF INTENSITY- If the stimulus or experience is real, dramatic, or exciting; the more likely there is to be change in behavior.

Interpretation of the Law of Intensity

The more enjoyable the experience is, the more a person would do it.

Examples of Activities Performed to Support the Law of Intensity

Letting the students do the calculations made the class more enjoyable since almost everyone was involved.

Applications of Laws of Learning

Title of Lesson: Introduction to D.C. Theory

Date of Lesson: May 21, 2008

Primary Delivery Methods Used: Lecture, class response, power point presentation, white board, related textbook and handouts.

Primary Laws

Law of Readiness: A person learns best when he or she is ready to learn and can connect pervious experiences with new ones.

Interpretation of the Law of Readiness: The ability as an Instructor to connect the importance of trade leaning and how it relates or is applicable to the desired skills needed to perform hands on tasks in the field. If this is accomplished the apprentice will be motivated to connect previous experiences to new skill sets or knowledge base.

Examples of Activities Preformed to Support the Law of Readiness: Creating a simple D.C. circuit consisting of a battery (power source), a switch (resistance), and complete wire path (circuit) I demonstrated how an open switch acts like infinite resistance. Thus proving Ohm's law that current in a circuit is directly proportional to the voltage applied and inversely proportional to the resistance.

Law of Exercise: Learning and retention are strengthened if an experience is followed by practice.

Interpretation of the Law of Exercise: In order for the transfer of knowledge to happen something taught must be mastered by the learner. This happens when subject matter is used in an exercise either on paper or by a skill manipulation task. By performing an activity repetitively new insight is retained. New results and new ways of thinking are learned to accomplish the same task.

Examples of Activities Performed to Support the Law of Exercises: On of the objectives of Introduction to D.C. Theory is to understand the electrical relationship of voltage, current, and resistance in a series circuit. This relationship is expressed by Ohm's Law, E=IR. I try to accomplish this task by first defining the three terms and how they interact in a simple D.C. series circuit. Then I give the students handouts that contain a diagram using the electrical components: voltage source (battery), a load (resistance), and a complete wire path

(circuit). With this background information and simple diagrams the class begins to assign at least two values such as voltage and current to find a third or unknown value resistance. By performing this task multiple times with different values, one begins to grasp and master the concept of Ohm's Law and the relationship of all three key elements of an electrical circuit.

Law of Effect: Learning and retention are strengthened if an experience is followed by pleasure and weakened if followed by displeasure.

Interpretation of the Law of Effect: Moving an student from an know experience to and unknown experience with a positive outcome, by building upon existing knowledge and connecting the dots in a way that a person can understand. Thus resulting in a positive experience, if this is not accomplished material will not be retained as well.

Examples of Activities Performed to Support the Law of Effect: A large block of time is devoted to working out Ohm's Law with the use of the electrical diagrams. One way to help obtain the desired results is to encourage individuals who are struggling to ask their desk partners to help unlock some of the perceived mystery of Ohm's Law. I have found three benefits from this. The individual who needs help usually understands better from a peer and starts to see the big picture and is soon working the problems out by themselves. The desk partners benefit by learning how to take their knowledge base and bestow it on the individual who is struggling. This boasts the person's confidence in the their mastery of the subject matter. I benefit because I can interact with the groups and learn new ways to instruct and communicate with future classes.

Secondary Laws

Laws of Primacy and Recency: Apprentices will remember material presented first and last more readily than other material.

Interpretation of the Laws of Primacy and Recency: Human beings tend to remember items and facts which are presented first and foremost as well as the last items of subject matter. Everything in the middle seem to be in competition with the bookends of knowledge.

Examples of Activities Performed to Support the Laws of Primacy and Recency: During my eight hour D.C. theory class I try to break up the day with quick stretch breaks. I ask the class not to let me go more than an hour and fifteen minutes with out a break. This divides my class schedule into shorter topic specific, knowledge building sessions. Each session has a main topic and learning objective which is stated at the beginning of the instructional period (primacy). I have a closing topic or subject at the end which sums up and ties together the individual study blocks as well as connects each study block to the next (recency). Before breaks the class discusses the material recently covered and I give a brief introduction to next topic. This helps reinforce all material covered, not just the first and last material introduced.

Law of Intensity: If the stimulus or experience is real, dramatic, or exiting; the more likely there is to be change in behavior.

Interpretation of the Law of Intensity: Learning should stimulate not only the brain but as much of the physical and emotional sense as well. Human beings learn from the interaction with the surrounding environment.

Examples of Activities Preformed to Support the Law of Intensity: One teaching aid I use to capture the Law of Intensity is an experiment that involves all three elements of Ohm's Law. The elements are: voltage (120v receptacle), fixed resistance (light bulb), and a DMM (to measure current). I first ask the class to work out the amount of current flowing through the circuit with the fixed resistance of the light bulb and the voltage source 120v(applying Ohm's law). Then by physically building and measuring a practical circuit and comparing to the assumption worked out on paper I am able to illustrate the practical application of Ohm's Law. This experiment stimulates both the physical and the emotional learning process of cognitive thinking.



Preparation and Planning

Subject: Fall arrest equipment

Instructor: Jason Armstrong

Class length: 10 minutes

Location: NTI

Training aids: Full body harness, shock absorbing lanyard, power point presentation, handout.

References: OSHA Code of Federal Regulations, Subpart M, Fall Protection (www.osha.gov)

NIOSH Worker Deaths by Falls

DHHS (NIOSH) Publication No 2000-116

Manufactures suggested information for use of fall arrest equipment

 Performance objectives:
 Understand the term personal fall arrest system. Competently

 perform a safety check of the full body harness and shock
 absorbing lanyard. Properly adjust the full body harness for a

 functioning fit.
 functioning fit.

Teaching methods: Demonstration, Questions.





Presentation

Introduction: This lesson will focus on personal fall arrest equipment used in the construction industry to reduce impact to the body during a free fall event.

- Primary components: Full body harness, Shock absorbing lanyard (Show).
- Proper fit adequate anchor point free fall decent rate greatly reduced
- Downward force applied to body greatly reduced.
- Length of lanyard prevents contact with lower surface.
- Goal to greatly reduce injury due to falls common in construction industry.
- Up to 33% of fatalities in construction accidents.
- Discuss term Personal Fall Arrest System.
- Demonstrate: Effectively inspect harness and lanyard for safe operation condition.
- Properly adjust harness for maximum protection.

Performance objectives:Understand term Personal Fall Arrest System.Competently inspect personal fall arrest equipment.Properly adjust harness for functioning fit.

I. Personal fall arrest system: A system designed to limit free fall distance to 6' or less and limit maximum arresting force to 1,800 pounds with the use full body harness and shock absorbing lanyard.

A) Primary objectives:

 Bring employee to complete stop, and to limit maximum deceleration distance employee travels to 3 ¹/₂ feet.

2) Prevent an employee from contacting any lower surface or structure.

B) Personal fall arrest system consists of:

- 1) Anchor point.
- 2) Connectors:
 - a) Carabineers
 - b) Self locking snap hooks
 - c) Dee rings
 - i) All capable of supporting at least 5,000 pounds.
- 3) Shock absorbing lanyard
- 4) Full body harness.
- C) Personal fall arrest equipment must be inspected for damage and wear prior

K.

to each use.

II. Full body harness inspection: Key Points.

- A) Harness material must be inspected for any cuts, abrasions, or wear marks.
 - 1) Look along the entire length of the harness!
- B) Observe all stitching for signs of wear.
 - 1) Frayed threads or loose seams are a concern.

C) Check for missing snaps or grommets.

- D) Examine all Dee rings, Buckles, and Clasps for cracks or fatigue.
- E) If any of these items are discovered take out of service!
 - 1) Safety performance may be jeopardized.

III. Lanyard inspection:

- A) Check fabric for cuts, abrasions, or worn stitching.
- B) Check integrity of dynamic break device.
- C) Snaphooks must be self locking type.
 - 1) easily lock into place.

IV. Fitting harness:

- A) Clip lanyard to Dorsal Dee ring (show).
- B) Place shoulder straps on shoulders.
- C) Fasten chest strap.
 - 1) Slide clasp through slot.
 - 2) Adjust chest strap.
- D) Remove items from pockets: Prevent injury from pocket knives, screws, keys.
 - 1) Prevent unnecessary reduction of circulation of legs.
- E) Grab one leg strap.
 - 1) No twists or crossing!
 - 2) Insert into buckle. Leg strap should be snug around groin area.

F) Repeat other leg.

- G) Dorsal Dee ring in center of back between shoulder blade area. Chest strap tight.
 - 1) Adjust shoulder straps if necessary.

H) To Adjust Shoulder Straps.

- 1) Bend forward lift up buckle.
- 2) Create loop with thumb/forefinger.
- 3) Stand up check chest strap.
- 4) Lift top of buckle away. Pull shoulder strap straight up.
- 5) Repeat other shoulder strap.

In a moment each of you will perform the safety inspection/ harness fitting

exercise. Any questions.

Application: Observe students modeling tasks.

- A) Observe and reinforce key points for safety check.
 - 1) Cuts/abrasions/cracks
 - 2) Frayed stitching/loose straps
 - 3) Missing items: grommets, snaps.

B) Lanyard properly attached to Dorsal Dee ring

- 1) Correct snap hook used (closest to dynamic break device).
- C) Snug leg loops.
- D) Shoulder straps adjusted to allow proper position of chest strap/dorsal Dee ring.

A set of oral questions will determine students comprehension level of information presented in the lesson. An unassisted demonstration will determine if the skill level required to properly check and fit the equipment has be obtained.

Oral questions:

- 1) What are the two key components of personal fall arrest equipment discussed today?
- 2) While performing a safety inspection prior to use, you notice a cut in the chest strap of your harness. What should be done with the harness?
- 3) Which end of the shock absorbing lanyard is attached to the dorsal Dee ring?
- 4) Should items be removed from your pants pockets?

Unassisted demonstration:

- Perform personal fall arrest equipment safety inspection covering all key points mentioned in the lesson.
- 2) Fit harness correctly for maximum protection during a free fall event.

Assignment:

Read fall arrest handout and answer the five questions on the last page.



NTI Manipulative Skill Lessons



Tools: Belden Cable Stripper 1797B; Z-RJ45 Crimper; Cable Tester; Wire Cutters

Materials: (20) EZ-RJ45 Jacks; (50') Cat 5 UTP

Step One: Prepare the Listener

Knowing how to terminate twisted pair cables is knowledge every Journeyman Wireman should have. Twisted pair cables are being used for far more than just voice/data applications. They are currently used in a variety of applications in Commercial, Industrial and Residential settings. Can you (students) name a few.

Step Two: Presentation

Today I will demonstrate how to terminate an RJ45 jack on Cat 5 cable. I will demonstrate the terminations using the T568A protocol, which is widely used in residential applications by systems such as On-Q.

- First use a stripping tool (I am using a Belden 1797B cable stripper) to strip off two inches of the outer jacket of the Cat 5 cable. Place the cable in the slot and rotate the stripper at least on full revolution while holding the cable with the fingers of the other hand. The two-inch piece of the jacket should slip off with a gentle pull.
- Next grab the pairs one at a time between the index finger and thumb near where they exit the
 outer jacket and untwist approximately one half turn. Now use the pick end of the tool to untwist
 and separate the twisted pairs. Do this by placing a single pair in the slot with tip of the metal
 pick between the pair where you just separated them by untwisting. Place your thumb on the
 concave area in front of the pick to hold the wire down and pull on the jacket of the wire until the
 ends clear the pick. That pair should now be untwisted. Continue this operation until all four
 pairs are done. Use fingers to straighten.
- Next, grab the wires with the left hand between the thumb and fingers and begin sorting the wires beginning with the green pair on the left. Continue placing the wires in order according to the wiring guide for T568A. When all the wires are in order slip an EZ-RJ45 Connector over the wires with the tab down. Push the connector until the jacket is inside the connector. Recheck the order of the wires. If they are correct proceed to the next step. If not, slide the connector off and make the correction before proceeding.

- Insert the connector with the cable in place into the Crimp Tool crimp port. Then squeeze the handles together. The tool will not release until the crimp is completed. Blades on the crimper cut the excess wire away leaving a connector ready for testing.
- When both ends of the cable are terminated, the final step is to test the cable. This is most easily done using a commercial tester. Simply plug the cable into the appropriate ports and the tester will map the pairs and indicate if there is a problem. If the cable tests OK, then it is ready to be put into service.
- Questions?

Step Three: Application

Distribute tools and materials to the students. Have each student install a RJ45 jack to both ends of their 36' cable. Move about the room answering questions and making-sure the students are performing the task as demonstrated. When they are finished, test the cables to see if they have done the task correctly. Congratulate students for a job well done.

Step Four: Evaluation

Have the students terminate another cable without assistance to verify they understand the process. Test the completed cables to verify the task has been executed correctly.



Second, Third, and Fourth Year sample assignments will be posted in the future.



A criticate of Gomplexi.

Washington State Apprenticeship and Training Council of Apprenticeship

has satisfactorily completed an apprenticeship in accordance with the standards of the trade, as approved by the Washington State Apprenticeship and Training Council, and hus completed the required hours of related school instruction and is bereby recognized as a journeymen, together with all the Joint Apprenticeship and Training Committee at the trade of CONSTRUCTION ELECTRICIAN METRO ELECTRICAL WORKERS rights, privileges, and opportunities which everywhere pertain thereto. This is to certify that UMALL, GERONIMO (RON) M 8000 houtan agreement with of

Whereof let this diploma with official signatures bear witness.

MASSAGEDA STATE APPRENTICESHER & THANHING COUNCIL Given at Olympia in the State of Washington this two b tub A CRETAR 96 A.D. 19 January 5

à

FLERO LINCOUL ON MREADERS & THANKS COMMITLE

SECRETARY

CHURCH CO



The Unistees



Mational Joint Apprenticeship and Training Com

U INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS. and the for the

alle o

NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION upon the Recommendation of the NATIONAL JOINT APPRENTICESHIP AND TRAINING COMMITTEE

do hereby present this certificate to Ron Umali

2008 Significant Changes to the NEC/Train-the-Trainer indicating they have satisfactorily completed the course

which is herewith admowledged by the following signatures on this twenty-fifth day of January in the year 2008

Eneret Mar Dresident, 998690

Joh M. Hun-



ģ

Correntine Director, NJ. A. To James / Old Melo J. Goon





The National Joint Apprenticeship and Training Committee and the University of Tennessee do hereby present this

Certificate of Completion

to

GERONIMO UMALI

for satisfactorily completing all requirements for

Course #10 - Principles of Learning Course #11 - Elements of Trade Teaching at the NJATC Mational Training Institute

given this 10th day of August, 2007

Med J. Cellen

Executive Director, NJATC

NTI Professional Education Executive Coordinator

International President, IBEW lie the m. Dra Elan AM

Executive Vice President, NECA

And a state of the state of the

The University of Tennessee

Continuing Education Units Transcript

Transcript provided by University Outreach and Continuing Education Registrant ID#: XXX-XXXXX

Printed December 7, 2007

Geronimo Umali 16021 NE Airport Way Portland, OR 97230

Date Earned	Topic/Study Area	Location	Credits	Course
	Category CEU Credits			
08-10-2007	NTI 2007, NJATC	UT Knoxville, TN	2.000	NTI2007
08-10-2007	NTI 2007, NJATC	UT Knoxville, TN	2.000	NTI2007
08-10-2007	NTI 2007, NJATC	UT Knoxville, TN	2.000	NTI2007
08-10-2007	NTI 2007, NJATC	UT Knoxville, TN	2.000	NTI2007
11-11-2007	Craft Certification	Orlando, FL	1.200	42962799
11-11-2007	Craft Certification	Orlando, FL	1.200	42962799
	Total Credits for Category CEU		10.400	
		Total Credits	10.400	

Mary Jer

Director, Professional and Personal Development University Outreach and Continuing Education

COMPLETED THE SEMINAR & NTLLED Management Problems of the Technical Person in a Leadership Role ALL REPORTS March 1997 FRED OPRYOR SEMINARS CHIS IS TO CONFIRM THAT A BIVISION OF PREDE RESCURCES, INC. red U Lyon dole MN 27, 1992 CONTINUE TREATING BUILS ること、これを YEAR LARY 1.0 1.144 The state of the s



Maltirk Mark Pris Might Schand Aus sutisfactorily completed a Course of Study prescribed for Graduation from this School and is therefore awarded this Geronimo M. Umali This Certifies That

Hand De Junite chan

Awarded in the month of June, nineleen hundred and eighty-fino.

Bitulunus

Eller Williama

Daug M. Kipp

Mortland Community College

The Baard of Directors of Partland Community College by wirtne of the authority nested in them by the State of Oregan and upon recommendation of the farulty, hereby confer the degree of

Cond Base

Associate of Applied Science Industrial Technology

Geroninus M. Umali

CUL.

with all honors. rights and privileges thereants. Given at Portland, Oregon, this fifteentif day of June, 2002

Doren Hansohin

gene Carreor



My Family



My beautiful wife, Melissa

My daughter Amanda on her birthday, Feb 19, 2008





Proud father getting ready take Amanda home for the first time



Operation Iraqi Freedom '06 to '07



Me and one of my students, Dan Ratliff, in Iraq

As the planning @ estimating specialist, tracking the progress of projects was one of my many resposibilities





Site assessments of combat outposts in Al Anbar was one of my other responsibilities



COMMANDANT NATO School

Unit 24503, APO AE 09172-4503 Am Rainenbichl 54, 82487 Oberammergau, Germany www.natoschool-shape.de



8 August 2003

CE2 Geronimo M. Umali NATO School Rainenbichl 54 82487 Oberammergau Germany

Dear CE2 Umali,

You are commended for your "can do" attitude and outstanding performance of duty during the deployment for training at the NATO School, Oberammergau, Germany, from 28 July 2003 - 14 August 2003.

Your contribution on the project to enhance anti-terrorism and force protection capability at the off-compound facilities of the NATC School has been absolutely critical to this international organization, in support of the global war on terrorism.

In the best traditions of the U.S. Navy SEABEEs, you hit the deck running, immediately grasped the mission tasking, and quickly mastered the differences in German equipment, material, and building techniques. Your skills and hard work have been instrumental in keeping the project on track and ensured another "mission complete" for your fellow SEABEEs and the NATO School.

Your outstanding performance reflects great credit upon yourself, your unit, and all U.S. Navy SEABEEs. Bravo Zulu!

Sincerely,

MARK P. SULLIVAN Colonel, US Air Force Commandant



Old Truck

HOBBIES



Waterskiing



Travel

Street Rodding a '57 Chev 1/2 Ton Pickup



9 inch Ford Axle ready for assembly

Street Ready with new dual exhaust and 845 x 16R50 wheels and tires



New Running gear installed. 350 cu. in. Chevy small block, 700R4 automatic overdrive transmission and 3.50 : 1 gears.

