



THE ACADEMY OF ELECTRICAL CONTRACTING

PAPER PRESENTED BY FELLOW
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DRAFTING THE TOP-RANKED TALENT

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From the ETA Apprenticeships to the NEBF Retirement funds, NECA-IBEW has some of the best statistical and factual data to measure the flow of incoming and outgoing talent through our organizations. It is in this data, and our own communities and companies, where we plainly see that there are not enough young people seeking our many viable high-wage careers to fill the void created by the retiring masses.

That is to say, in today's market conditions it has become clear that there is meaningful competition in the draft for top-notch players. This jockeying for talent is even more evident after COVID as well as a cultural shift away from traditional blue-collar careers by the younger generation. While this isn't a true statement about *all* young people, I hope you'll hear me out.

Until recently, we have been able to keep up with the demand for new talent through existing, organic channels: Apprentices become Field Foreman who then flow into the office. In the past, we were also able to gain a large amount of new management talent using conventional recruiting methods like college outreach programs, headhunters, personal and professional relationships, and job fairs.

Now, though, we not only have to compete for this shrinking talent pool of workers against open shops and other construction trades, but also giant corporations outside of our industry who have a mighty pull on young people thanks to better brand recognition, the support of career advisors in educational institutions, and massive social media recruiting campaigns. The end result is that the applicants that we are attracting are of insufficient quantity and/or quality to meet our needs.

I'm here to tell you that *there is a land filled with a never-ending supply of young hard-working people* more eager to learn and work than the recruited populations we've begun to settle for.

What If we could respond with complete commitment as if our corporate lives depend on it (because they do)?

The NECA-IBEW establishment is the premiere leader of the organized construction trade. There are no limits to what we could accomplish if we hyper-focused on this objective. We must also envision the future if we don't take radical chances to satisfy our needs for talent. It's time that we *change the rules of the game to play to our strengths and play to win!*

As we all know, "necessity is the mother of invention," so perhaps these ideas are not new ones. In fact, I'm confident many of my fellow contractors have individually-managed programs like the ones I'll describe in the following pages. It's entirely possible that many of the ideas that I'll discuss have been spoken about for decades. My intention is to honor those ideas and put them into one place so that a new approach might gain some traction.

Where is this land full of bright young people that will eagerly apply for all our open positions? Read on to see my roughed-out ideas that vary drastically in costs and complexity; each has the potential to move the electrical industry into the best position for these talented future members of the workforce!

The Land of Bright Young People

Ask yourself: What are the basic characteristics of a successful Apprentice, Journey person, Foreman, Superintendent, Project Manager, Estimator, and any of the Management and supporting electrical industry career paths?

The most successful employees possess most of these skills:

- Coachability
- Eagerness to learn
- Leadership traits
- Imagination and creativity
- Willingness to get dirty
- Team orientation

- Responsible to and accountable for their actions
- Able to control their emotions under stress
- Sense of humor
- Enjoy people as a whole and the diversity of other cultures
- Desire to be considered a respected professional

And where might we find the bright young people with these qualities?

They're student-athletes in high school and those fresh from high school and college graduation.

They're middle school and high school Future Farmers of America.

They're in shop classes and construction clubs in middle and high schools.

They are the neurodivergent youth whose ADD and ADHD diagnoses can feel like an obstacle, but we can turn into our superpower.

In the coming pages, I'll share six programs for reaching these groups. I believe that if we invest significant effort into the following program ideas with our personal time and treasure, using all the resources at our disposal, then we will catch our competition flat-footed in this contest for young talent.

I invite you to join me in blue-skying these ideas, imagining unlimited resources with NO restrictions on what is possible! We can worry about reality later.

Apprentice-Athlete After Student-Athlete [Post-High School Athletics with Apprenticeship]

With this idea, we are satisfying the student-athlete's desire for a few more years to compete in their favorite sport while also teaching them a trade as an Apprentice-athlete. By creating sports teams located within each local union jurisdiction, we can recreate the spirit of interscholastic competitive athletics for Apprentices while also teaching them the

foundations of our trade. We could become the 1st choice for all trade-minded and undecided graduating high school student-athletes.

Structure

- Day school format for Apprentice-athlete with a four-day workweek and Friday school and team practice
- Designated separate program to run in parallel to existing apprenticeship program
- Sports selected will match local community high school programs to build conduit for athletes
- Cultivate funding sources designated exclusively for athletics
- Build entire structure from national athletic director to regional directors using NECA districts
- Utilize the 23-college credit resource as access to state funding
- Designated instructors specifically for athletes
- Year-round school to reduce duration of apprenticeships
- Used equipment, borrowed facilities, and retired coaches to begin
- Creating a hierarchy similar to those found in junior college athletics departments

Positive Outcomes

- A pipeline for student Athletic Trainers for sports programs to become Safety Directors with on-the-job training on the field
- Morale boost for IBEW LU's and NECA chapters and contractors through the spirit of competition
- Huge quantities of new apprenticeship applicants immediately and every year thereafter

(For example, one football team with supporting positions means 60-100 new Apprentices)

- The electrical contracting community brought to national awareness overnight
- Immediate flood of diverse applicants from historically difficult-to-recruit student populations
- Sponsorship opportunities throughout our industry
- Create playoff brackets that reach all the way to a National Champion using LU designations

Sports to Embrace

- Tackle Football
- Soccer (men’s and women’s)
- Softball
- Track & Field (men’s and women’s)
- Basketball (men’s and women’s)
- Rodeo Sports (Mid-Western states)
- Winter Sports (Northern states)

Challenges

- Brand new structure and elapsed time to market
- Enormous amount of funding needed including wages and benefits for the athletic staff
- Navigating sports related injuries as possible workers compensation claims
- School year vs sports season vs working hours
- Determining fair compensation given a workweek split between job sites, school, and sports practice

Contractors College of Electrical Technology [Post-Apprenticeship or Hybrid with Junior College Athletics and AS degrees]

Imagine a dedicated junior college specifically to support the NECA Contractor. It would have all the elements students and families are looking for in a two-year college. Its primary focus would be on the student-athlete, but traditional college students can also attend.

There would be “direct connect” agreements for apprenticeship graduates into CCET and onto select four-year universities after CCET graduation.

Structure

- Brick & mortar college campus with athletic facilities
- Students would earn associate degrees that serve the electrical industry (For example, Accounting, Project Management, Electrical Engineering, IT & Coding, Sustainable Energy Design, Business & Contracting, Kinesiology & Safety Director Certification, Labor Relations, etc.)
- Require one-month per semester of field lab experience with NECA contractors
- Scholarships for academics and sports
- Recruit nationwide (much like the Merchant Marines and Colorado Mining College)
- College-level instructors and professionals
- Eased path to four-year universities through strategic partnerships
- ALL corporate positions can benefit from new talent resource (field and office personnel)
- Mascots, cheerleaders, and marching bands for overall appeal to trade outsiders

Positive Outcomes

- Graduating Apprentices can continue onto AS Degree path seamlessly (with 23 of 60 required credits)
- High school graduates can apply and try out for our college teams directly
- Can pick up student-athletes from “dead-end degree” colleges
- A meaningful new path for NECA contractors in recruiting family and friends
- EC field and staff continuing education
- NTI would have a permanent home with instructors for ETA instructor training

- National recognition as we compete head-to-head with junior colleges
- Centralized career advising by qualified industry experts for best results for students
- NECA-IBEW pride and morale boost during competitive season play

Sports To Embrace

- Tackle Football
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- Rodeo Sports (Mid-Western states, depending on location of campus)
- Winter Sports (Northern states, depending on location of campus)

Challenges

- Initial cost for college-level facilities and staff
- Developing college staff for desired educational outcomes
- Sustainability of funding through contractor and labor philanthropy and other benefactors
- Balancing traditional trade ideals with college student ideals
- Competitiveness of athletic programs to maintain morale
- Messaging to new recruits and families regarding facilities and careers upon graduation
- College accreditation process for trade college (closed system operated by an existing junior college structure that typically resists apprenticeship credits)

Player To Project Manager [Post-College Student-Athlete Office Management Recruiting Program]

This program is near and dear to my heart. We have run a beta program in our company specifically recruiting student-athletes who are graduating from colleges and universities with degrees that can quickly translate into our office management. These Assistant Project Manager Interns will be treated the same as when they were recruited by their college with official visits and offer letters with NECA-IBEW signing days. The APM Intern will go through an abbreviated whirlwind introduction and education of every facet of our industry in just 12 months. Over the last four years, the two young men in our beta program have become an integral part of our company and have enjoyed the new friends and their introduction to this exciting industry.

Structure

- Recruit student-athletes with college degrees that support electrical trade (for example, Business, Engineering, Accounting, Finance, Contracting, Logistics, Computer Technology, etc.)
- NECA National new position of Executive Recruiter to establish a focused approach; this office would be a connection point between NECA contractors seeking talent and the young candidates as well as be responsible for developing relationships with college athletic directors and career advisors nationally
- The secret sauce is bringing the student-athlete from college back to industry opportunities in their home state
- Required to work for three months in the field as construction Wireman while rotating projects weekly
- Pay equal to CE or 3rd year apprentice for the first 12 months of Assistant PM internship

- Room and board provided for 12 months (with stipulations for proper performance)
- Contractual internship agreement offering a positive NECA reference or job offer upon completion
- Utilize trade partners to expedite training in various sectors (for example, distributors and sub-contractors)
- 12 months of abbreviated training in estimating, scheduling, schedule of values, labor relations, NECA organization, job costing , ERP software and office management
- APM Interns follow a day in the life of an ETA Apprentice each year as a way to build experience and empathy across teams
- After internship completion, students can gain more employable skills by adding a one-year AS Degree in Project Management and office accounting
- APM Intern can also select apprenticeship if they feel that the electrical foremanship and IBEW are a better fit for them

Positive Outcomes

- Add educated, disciplined student-athletes to our contracting ranks
- Students gain experience in multi-tasking and high pressure demands
- Reduce erosion of top field supervision to fill office management positions
- APM is cost effective compared to field supervision without office management skills
- APM Interns develop working relationships with high level Foremen and Superintendents
- APM Interns quickly grasp electrical trade organization and structure
- Diversification of talent pool due to focus on student-athletes
- New blood energy inside contractor and NECA chapters

- Constant new influx of trained APMs and PMs
- Interns' low entry wage and expiration of room and board compensation provides built-in wage increase after 12 months (equal to half of the room and board expenses)
- APM Interns, Electricians, and Apprentices develop mutual respect through their time together in the field
- Skilled general Foremen and Superintendents remain in the field to manage workforce productivity

Challenges

- Establishing new NECA Executive Recruiter position in NECA National organization
- Time for Executive Recruiter to develop college AD and career advisor relationships
- Matching desired quantity of student-athletes for each home state and contractor
- Maintaining wage and benefit balance compared to existing field workforce and other corporate market opportunities
- Lack of trade knowledge inhibits some work tasks which will create reliance on Superintendent or Foreman for material, methods, and code support
- Transient nature of today's young workers (people have more jobs over the course of their career than was once the case)
- Affordable housing and roommate arrangements for the Interns first 12 months

Electrical Systems for the Budding Agricultural Professional [NECA Training Curriculum for Middle School & High School FFA Club Members]

There appears to be an exciting opportunity to synchronize both the ETA's need for new high school applicants and the existing talent currently found in high school chapters of the Future Farmers of America (FFA). NECA/IBEW

(ETA) could create a new Electrical Systems for Agricultural Professionals classroom/lab experience curriculum to be used for the public school systems by their FFA club teacher-sponsors. This will introduce these young people to the electrical industry as well as help them understand all the career choices available to our ETA apprenticeship graduates.

Structure

- A completely rewritten electrical theory and installation curriculum for FFA club members as a turn-key, multi-module system delivered to public school systems
- Structure in the form of student texts, e-books, hands-on lab experiences, and instructor manuals
- Each electrical system training module taught on a schedule of four week-long modules
- Age-appropriate curriculums for middle and high schools
- Course could be taught several ways: completely by JATC instructor, completely by public school instructor, completely by NECA or IBEW Journeyman, or a combination of these options

Sample Curriculum

- Use Barns & animal work machines & tractors to teach AC/DC Theory:
 - Tractor = DC battery circuits
 - Barn = AC meters/service loads (convenience receptacles and lighting; special agricultural equipment with motors and PLCs, LV systems, lightning protection and TVSS systems)
- Explain AC electrical power systems control and distribution:
 - Battery storage systems
 - Wind farm technology
 - Photovoltaic systems
 - Utility power distribution systems

Positive Outcomes

- The Electrical Systems for the Farming Professional course can be in every FFA Club in the nation which would increase the ETA (NECA/IBEW) brand recognition considerably
- Direct recruiting of young talent that enjoy working outdoors and getting dirty
- Open dialog with parents, school faculty and career advisors about the electrical industry
- Gaining visibility by attending or sponsoring FFA special events as NECA-IBEW
- Gain visibility through FFA local, regional, and national competitions by integrating electrical models for agricultural businesses
- Join electrical trade partners that are currently engaging the agricultural community

Challenges

- Initial breakthrough into closed FFA organizations around the nation
- Development of exciting age-appropriate curriculums for teachers & students
- Costs for curriculum, teaching materials, and lab project kits
- Sustainability for NECA-IBEW involvement
- Quantity of contractor-volunteers to go into the clubs
- Wages & burden for ETA instructors to teach modules

Electrical Systems for the Construction Professional [NECA Training Curriculum for the Construction Clubs and Shop/Industrial Arts Classes in Middle and High Schools]

Existing public school shop and industrial arts classes, along with construction clubs, at middle and high schools are an obvious fit. The twist

that NECA-IBEW contractors can bring to the table are job site visits and behind-the-scenes access to amazing projects and venues.

This program could incorporate large-scale commercial, industrial, and residential projects that demonstrate the importance and magnitude of the electrical trade. These opportunities are something that can set us apart from the competition for the best and brightest.

Structure

- A completely rewritten electrical theory and installation curriculum for the shop/industrial arts student as a turn-key, multi-module system delivered to public school systems
- Structure in the form of student texts, e-books, hands-on lab experiences, and instructor manuals
- Each electrical system training module is taught on a schedule of four week-long modules
- Age-appropriate curriculums for middle and high schools
- Course could be taught several ways: completely by ETA instructor, completely by public school instructors, completely by NECA or IBEW Journeyman, or a combination of these options

Positive Outcomes

- The Electrical Systems for the Construction Professional course can be in every shop and industrial arts class in the nation which would increase the ETA (NECA/IBEW) brand recognition considerably
- Direct recruiting of young talent that enjoy working outdoors and building things
- Open dialog with parents, school faculty, and career advisors about the electrical industry
- Future Builders of America special event sponsorship, access, and visibility

- National competition support and scholarships access and visibility
- Join electrical trade partners who are currently engaging the construction-education community

Challenges

- Initial breakthrough into middle and high school organizations around the nation
- Development of exciting age-appropriate curriculums for teachers and students
- Costs for curriculum, teaching materials, and lab project kits
- Sustainability for NECA-IBEW involvement
- Quantity of contractor-volunteers to go into the classrooms and clubs
- Wages & burden for ETA instructors to teach modules

ADD & ADHD Students are the Secret Weapon [Highlighting the Positive Characteristics of Persons with ADD & ADHD and Demonstrating how they Translate into our Industry]

There is a very large population of individuals that have been and will continue to be diagnosed with Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD). All too many people with these diagnoses end up feeling shamed and embarrassed for their unique brains. They have found creative ways to hide their natural instincts due to the mistreatment of society's educational institutions. I've heard from so many of our very best Journeymen, Foremen, Superintendents, and Project Managers that, "College just wasn't for me," and how much they hated school.

In these individuals, we find many industry-relevant attributes including:

- Creative troubleshooting of complex problems
- Highly skilled at multi-tasking
- Spontaneity and flexibility

- Last-minute game plan strategies come naturally
- “H” stands for hyper-focus
- Resilience and grit due to conquering early life challenges
- Communication skills are at higher level, especially body language
- Innovation occurs by the minute
- Naturally curious
- Open to new ideas, experiences, and learning opportunities
- Increased sense of self-awareness

I believe the college classrooms’ loss would be our great gain, fitting nicely into our apprenticeship structure and excelling at the curriculum and OJT. NECA-IBEW could be the guiding light of hope for these children and parents with our opportunities to create the potential for a lifetime of career satisfaction.

Structure

- Build new ETA pre-apprenticeship and apprenticeship curriculums and program structure to accommodate some of the challenges found in these populations
- Psychiatric professionals will help design the pre-apprenticeship and apprenticeship programs
- Massive PSA campaigns to reach those with these confidential diagnoses
- High schools will be able to assist easier than the lower grades in school
- Creating guidelines for approved medication as it will sometimes be required

Positive Outcomes

- NECA-IBEW becomes known as the go-to career for ADHD young people by the community
- Increased quantity and quality of natural hands-on learners and leaders

- Existing pre-apprenticeship and apprenticeship programs can benefit from the overhaul since the ADD & ADHD students are already inside our classes
- Continuing education classes for Journeymen, Foremen, Superintendents and Project Managers would get a much-needed new approach since the diagnosed and undiagnosed are already present
- Stigmas and shame can be gradually reduced inside the NECA-IBEW population

Challenges

- Distractibility and risk-taking mentalities must be monitored during early training
- Locating the ADHD & ADD youth since the condition is confidential
- Gaining the trust of career counselors and school administrators
- Funding for the design of highly-active and visual curriculum to keep apprenticeship students fully engaged
- Confronting NECA-IBEW leadership as to justification of entire premise of ADHD & ADD as a secret weapon
- NECA-IBEW-ETA training on the new approach to working and instructing this newly-identified cohort
- Self-medicating with cannabis and alcohol is common concern for individuals with ADD & ADHD
- Drug screening for work may indicate amphetamine or methamphetamine from prescribed medications

After witnessing, experiencing, and studying ADD & ADHD characteristics, it's obvious to me that many of the 59 career paths inside electrical contracting are a direct match for these young people.

Our most successful people have ADD and ADHD and therefore we can become strategic and pursue this population specifically. NECA-IBEW-ETA could become the first in the

construction industry to frame ADD and ADHD as highly-desirable and strategic recruiting attributes.

In Closing

I believe that NECA-IBEW-ETA are positioned uniquely to make significant strides in improving our position in the draft for young talent that is underway. Our organized labor union and NECA structures improve our ability to replicate and franchise-style best practices in creative recruiting and educational programs. If we can move swiftly and quietly, we can capture the best and brightest student-athletes, agricultural- and construction-minded students, and the ADHD/ADD secret weapons before any of our competition has enough time to formulate a game plan.

To get our jerseys on today's young talent we cannot wait for enough resources or industry buy-in before we act. Time is of the essence. If we do nothing, we are doomed to become another casualty of complacency like many of the trades that have drifted into obscure unregulated irrelevance. If we do nothing, then don't be surprised to see drywall crews installing prefabricated boxes and circuit cables. We will be divided into three separate trades: Utility Electricians, Electrical Installers and Electrical Troubleshooters, and Quality Control technicians.

With the six programs I've described above, NECA-IBEW-ETA partners can change our future and take charge of our destiny by being an even more attractive and brighter option for today's youth than what they're finding online.

They *will* select a path for their future, and they *will* have careers, so let's make sure they know everything about us before they make that extremely important personal decision to embark on their first career.

About Bradley S. Giles

Bradley "Brad" S. Giles has been an advocate for his local electrical industry and the national

electrical community alike, all while working within the structure and ethics of NECA-IBEW.

Brad first joined the electrical industry as part of the IBEW/NECA Electrical Apprenticeship program in 1987. In 2001, Brad bought Giles Electric Company, Inc., the company his entrepreneurial father, Art Giles, founded in 1970, and has pursued excellence ever since. In the decades since, the company has continued to grow in size even while Brad founded and joined multiple initiatives with a focus on raising awareness of the electrical contracting industry and championing high-quality work. Among his many achievements are serving three terms as President of the North Florida Chapter of NECA, becoming the first Young Contractor member in the Electric International Foundation, and being selected to join the esteemed Academy of Electrical Fellows.

Brad credits his wife, Leigh Anne, and their two children for keeping him grounded throughout these years of dedicated work.



