

Renee Bryant

From: Renee Bryant
Sent: Monday, October 28, 2019 8:39 AM
To: Renee Bryant
Subject: Practical Element to the Journeyman's Exam

From: Philip A. Liggins <paliggins@lcsc.edu>
Sent: Thursday, October 24, 2019 5:54 PM
To: Warren Wing <warren.wing@dbs.idaho.gov>
Subject: Practical Element to the Journeyman's Exam

Warren,

Re: Agenda Item No. 04 Licensing Freedom Act Proposals – Approve or Disapprove

- Institute a practical element into the journeyman exam (specifically electrician and master) examination. Many applicants are not very good written exam takers, but excellent electricians practitioners. A portion of the exams could be a practical competency element to be performed in a lab setting.

I have great respect for you, the Electrical Board, and our apprenticeship partners (business owners and the apprentices/journeyman they employ) to work out any issues we may have in Idaho, to oversee and make improvements to our apprenticeship programs. I believe you would also appreciate the input of one of your related instruction providers, on issues of common concern.

My instructors and myself have worked very hard to develop and deliver a high level of related instruction towards the goal of student outcomes, which is having the knowledge of Idaho's electrical standards necessary to pass the existing journeyman's exam. We owe this to our students and those employers who have invested in them. To be fully transparent here, I have no fear of the apprentices in my program doing a practical as part of their journeyman's exam. My program's pass rate for the exam (first time takers) is very high for the span of 2013 through 2019. A practical will most likely increase that pass rate, if the highlighted Agenda Item above is true.

However, when I read Agenda Item No. 04, the logical question for me was, do we in Idaho have a problem? If we do, how do we resolve the problem? The highlighted statement in the agenda item does have some merit, but it is anecdotal at best. How can an apprentice become an excellent practitioner (journeyman) if they do not have the knowledge to answer some questions regarding such standards as load calculations, conductor calculations, use of the electrical code, etc.? If they don't understand these concepts, how can they pass a practical which requires them to use these concepts? I understand the nature of exam stress, but by the time apprentices have completed four years of related instruction, they have taken a myriad of exams, and had to pass them in order to move to the next year of study. Yes, we have some students who have to work very hard in their related instruction to complete all four years, but those who are truly motivated and accountable to learning do succeed, to include passing the journeyman exam. I hope we will not make wide ranging changes based solely on the reasoning highlighted in the agenda item.

Back to the question of; do we have a problem in Idaho with journeyman pass rates?

- According to DBS data, November 2013 – October 2019, there were (917) First Time Takers of the journeyman exam, and (696) passed, an average pass rate of 76%
- So, we are looking at the 24% of apprentices that did not pass, and asking why? (what percentage of that 24% passed their second attempt?) Or, based on the highlighted statement above, we believe a practical element to the exam will/may increase that pass rate. Of course the goal here may be to reduce the value of the knowledge

(standards) based questions, by inserting a practical which is more skills based. This might increase pass rates, but could have the counter affect for safety issues in the industry. Of course the administrator of any practical element to the exam would have to be an independent third party.

The Electrical Board and Career and Technical Education (CTECS Testing) currently publishes exam pass/fail rates for the journeyman exam and (CTECS) Years 1 – 3 testing. It is simple to assess which related instruction providers have high pass rates, and lesser pass rates. Each related instruction provider should be doing self-assessment, based in part on these exam results, which provide some blueprint for program improvement. The answer to that improvement (such as pass rate increase) however (in my opinion), is not to reduce the value of knowledge (standards) based questions on the journeyman exam, by adding a practical element (if the practical does not include the critical concepts that a journeyman must know, to be an independent worker). This would be opposed to what businesses need, a journeyman who can work independently, without supervision.

And of course this proposal may be a way to make it easier to pass the journeyman exam, and infuse more electrical journeymen into the workplace. If the Electrical Board and Employers are in favor of this change, then I have wasted my time here. I will support employers in our state, since they have the greatest investment in a growing workforce. My program will simply adapt to the change.

Lastly, I couldn't help but wonder what the pass rates were in other states, just for comparison purposes. Maybe you have sources that provide data for a larger sample size of states.

- **California 2017 Electrical Exams – Residential Electrician First Time Takers** pass rate: 23%, Repeat Pass Rate: 33%. **General Electrician First Time Takers** pass rate: 36%, Repeat Pass Rate: 41%. See - <https://www.dir.ca.gov/dlse/ecu/ElectricianExamOverview2017.pdf>
- **Texas 2018 Electrical Exams – Journeyman** pass rate: 33%. See - <https://www.tdlr.texas.gov/electricians/elecExamStats2018.htm>

Thank you for your consideration. I hope something I have said here will be helpful in this decision making process.

Philip A. Liggins

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