

NCARB Live Follow-Up: Exam Development, Division Changes, and Case Studies

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Jared Zurn [00:00]: Hello everybody. And welcome to the next video, answering questions from our most recent NCARB Live. In this video, we're going to talk about exam development, and then we're going to talk about some of the changes to the exam that are coming as part of the online proctoring option. So I'm going to start us off with the first question which is:

How are volunteers and current candidates chosen to take practice exams and provide feedback to develop the exam?

So the volunteer question is quite comprehensive, in that NCARB works with hundreds of volunteers every year on the ARE. And what we typically do is in the February timeframe, we do a call for volunteers out to various licensed architects all across the country. And we asked them if they would be willing to volunteer their time to either write new items for the exam, to review existing items for the exam, or to assemble and quality control check the items that candidates experience in the test center.

And so they said the call for volunteers goes out in February. Hundreds of people are willing to give their time, which we think is absolutely fantastic. And then what we do, is we sit down and we try to assemble work groups for each division of the ARE that really represent that cross section of the profession. As we've mentioned in other videos, we look for region of the country, firm size, gender, ethnicity. We really are trying to balance each of our work groups.

So how you can get involved if you're licensed, you can volunteer to be on certain committees that write items and review items. If you're a licensure candidate, NCARB has what we call Think Tank opportunities, where you can get involved with Think Tanks that give us feedback. We run ideas past you. You actually run ideas past us and really sometimes challenging NCARB to rethink the way we think about the exam.

Michelle Cohn [01:50]: All right, our next question, very related.

Is there a selection process where current candidates can apply to be included in these conversations?

So Jared just kind of described that, as far as that beginning of the calendar year process, when any potential volunteer can apply. Certainly, that Think Tank is a great place for current candidates to get involved. And this might also be a good time to throw out there, our licensing advisor program at NCARB.

So that's not focused specifically on the ARE, but there's another chance where candidates can volunteer as a licensing adviser in their community with their AIA chapter at their university, if they're still in school, and just be part of those conversations. Get some extra training from

NCARB to really provide that sort of mentoring perspective for other candidates or other architects who are looking for reciprocity. There's a lot that our licensing advisors do, and we always enjoy, again, having those perspectives as part of our just general NCARB conversations.

Jared Zurn [02:57]: The next question is:

Can NCARB share feedback that has been provided by volunteers who have taken practice exams, including some of the recent changes that you're going to see as part of the online proctoring option?

And yes, some of the changes that are coming, when NCARB started going down the path of building we call our forms for the online proctoring option, the original plan was to build them in sections. And kind of going back to the old 4.0 model where candidates were given a set of questions, they would be required to take a break. They would have another set of questions and be required to take a break and you do that throughout the exam, and then continually locking the items every time you were required to take a break.

We got feedback on that from volunteers that were like, "Ah, that sounds like a terrible idea." And they actually said, "Candidates are going to want flexibility. So can you build the exam in a way that really lets the candidate, if they want to, take as many items as they want before they take a break?" So that's the path we went down. We restructured the way we were building the exam to provide candidates more flexibility about when they take breaks.

We've also had volunteers provide us feedback on various aspects of using the digital whiteboard and also using the whiteboard to solve questions. We have a committee that looks at quality assurance of each form assembled and they're working on right now, pulling together items. But every item that they pull together that's going to be part of the online proctoring option, they, themselves, are solving using digital whiteboard tools. So they're not using scratch paper and pencil. They're not using free hand calculators. They have to use the same tool set that candidates have to use. And that's another quality assurance that volunteers do to make sure that the exam that you see as a candidate, has been met.

Michelle Cohn [04:38]: Our next question:

Have NCARB's volunteers been supportive of these changes?

And I think echoing some of what Jared has said, is that we have certainly heard support from our volunteers. We've also heard suggestions from our volunteers and recommendations about, "Well, this sounds great, but I wonder if it would be more useful for our candidates if ..." and then it's provided us some ideas of other things to research, other potential tweaks to look into.

We've had the same kinds of videos and conversations that we're having with you, our candidates. We've also been having with our volunteers, with our board of directors, with member boards, with AIA chapters, and really trying to spread the message far and wide, so

that we can keep everyone updated on changes and also start to get some of that feedback about maybe what changes need some more clarification or other additional tools to really help our candidates be able to move into online proctoring.

Jared Zurn [05:45]: So the next question:

Does NCARB have actual testing candidates on the Board or in a committee to bounce these items off of?

So there are no licensure candidates currently serving on the Board of Directors. The *Bylaws* for the National Council of Architectural Registration Boards actually requires that members of the Board are either a public member, a Member Board Executive (which is a staff person working with one of our licensing boards), or they are someone who has served on their state licensing board. So right now, we do not have any licensure candidates on our Board of Directors.

Jared Zurn [06:21]: **Do we have licensure candidates in committees that we bounce ideas off of?**

Absolutely. That's the Think Tank thing that we've talked about previously. We also have licensing advisors that are also licensure candidates. We do not have any licensure candidates on some specific ARE committees, because they are exposed to the questions. And so, on those committees, what we do is we bring in recently licensed architects. So not only are we balancing those committees again upon region of the country and years of experience, it really is about bringing recently licensed, so people who have passed the exam within the last year or two, to come in and give that feedback from more of that candidate perspective

Michelle Cohn [07:02]: All right. And last question related to exam development:

Are any psychometricians architects or trained as architects?

So just a quick little review here, if you haven't followed some of our other blogs or videos on this. So a psychometrician is someone who is, you could say they are trained in the science of testing. So that is not specific to architecture. That is about the field of testing. And so psychometrician, they work with NCARB, they work with other professional licensure exams, engineers, social workers, nurses. They might work with more certification type things; IT certifications and in similar programs like that.

So psychometrician work in a wide variety of settings, but all having to do with testing, and how do we test people, and how do we know if we are appropriately assessing the knowledge and skills that someone knows to be able to competently practice whatever profession or whatever occupation they are testing in. So the psychometrician that we work with are not architects. They are not trained as architects, but they are Ph.D.s in the field of testing.

We've been working with them for a number of years so that they are very familiar with our program. Some of them have become very familiar with specific content areas on our exam, but they are not there to review the specific content of the questions. That's why we have our

volunteers who are architects, who are writing the questions and reviewing the questions, as Jared just mentioned. Our psychometrician and other testing consultants are really there, again, to advise us on the testing process, and can we switch from say, a four-option multiple choice to a three-option multiple choice? We discussed that in a different video. Or what are the best practices around setting up a case studies or providing that professional editing expertise on the best way to ask a question in the straightforward way. So our psychometricians are an essential part of our test development process, but they are not there to be subject matter experts on architecture.

Jared Zurn [09:16]: Okay. Thank you, Michelle. Our next section on this video is to talk about the reduction in the number of items, some changes coming to the case studies and things like that. So the first question in this section is:

Why did NCARB shorten appointment times?

And I guess what I'll point out is, some of the appointment times did get shorter. Some of the appointment times actually stayed the same.

What NCARB did do, is we actually reduced the number of items per division or number of questions per division. And then there's a ripple effect that happens with that. So when you reduce the number of items, it actually said, "Oh, well, if we reduce the number of items, can we reduce the amount of testing time? Well, if we reduce the testing time, can we give candidates more time back for breaks?"

So it was actually a complex formula of, once you change the number of items, how can you then go back and adjust the other aspects of the exam? And so we'll talk more about that as we get through some of these questions.

Michelle Cohn [10:09]: All right, next question:

Is NCARB trying to shorten the test appointments any further?

At this point, no. We don't have plans to adjust their testing times any further. So what you see in the *ARE Guidelines* with online proctoring option, is what your test appointments will look like for the foreseeable future.

Jared Zurn [10:29]: The next question:

Why is the number of items decreasing?

And what I would say is because NCARB's trying to make this exam as efficient as possible. And I would say, this was not some random decision where we're like, "Hey Michelle, how about we get rid of 10 items?" And Michelle was like, "No, Jared, let's get rid of 15." It was not that at all. It really was working with the data that we have from ARE 5.0, to look at how different divisions are performing, how candidates are performing on different items and different content areas.

And then we did what are called reliability measurements. And that's again, where those psychometricians came into this.

So our psychometricians did this reliability study for us. They came back with some proposals on how we could reduce the number of questions per division, but still maintain reliability on the exam. That was vetted through our Examination Committee, some of those volunteer architects, and then was proposed up to the Board of Directors for approval.

So why are we doing it? We're doing it to make the exam more efficient. The less questions for you as a candidate, the more time we can give you for breaks and things like that, and hopefully reduce some of that testing fatigue.

Michelle Cohn [11:34]: Okay. So all that being said:

How much extra time will candidates have per question?

So I think the math on this works out to about 20 extra seconds per question, which I'm sure as a candidate, you're thinking, "Wait, this is a lot of discussion and you're giving me 20 seconds per question. That's not a whole lot more." We all know some questions, that you can answer really quickly. Some questions take a bit longer.

So again, that's just kind of average time per question. When you're in the test, of course, you'll continue to see that mix of some questions that answer pretty quickly. And knowing that it might not be 20 extra seconds per question, that might actually end up being more time per question, because you've gotten through other questions more quickly.

Jared Zurn [12:21]: So our next question is:

With the reduction in questions, will the new questions be relatively more difficult?

They will not. It's the same questions. We did not author a bunch of new questions for the release of the online proctoring option. So the questions that were in the item bank today, are going to be the questions that are in the item bank in the future.

Michelle Cohn [12:44]: Next question:

The current version averages about two minutes per question. How much time under the updated version?

So this goes back to my previous comment, which is, it does work out to about 2 minutes and 20 seconds per question, under the new version, with the reduction in the number of items and the slight change in testing time.

Jared Zurn [13:06]: The next question again on timing. It says:

The time available per question averages about 2 minutes and 20 seconds (as you've heard us say a few times now), which doesn't seem like enough time to this candidate, especially for case studies. What's the reason for this limit?

And I think it's really important to point out, as Michelle had said, that this is an average. We know we have some of the multiple-choice questions in there where candidates are answering them in less than 30 seconds. They read the question, they look at the options and like, "Yep, that's it." Onto the next question. Then they come across check all that apply, and that may take a minute and a half. And so really think of this as an average. You're going to as a candidate when you're testing know some questions happen very quickly, some questions you do have to posit a little bit more and think.

So we didn't do timing studies with our psychometricians. They were the ones that came back and actually proposed the updated time. The Examination Committee, when they looked at it, actually bumped up the time that the psychometrician had recommended and they said, "No, let's give the candidates even a little bit more time just to make sure that the candidates have that opportunity in the test center."

Michelle Cohn [14:09]: All right. And our next question, I think actually, yeah, our next question here:

What are pre-test questions? Why are they included and where are they located in the exam?

All right, so a three-in-one question here. So what are pre-test questions? Those are questions that essentially, we are trying out before they become operational questions. An operational question is a question that you're scored on. Every question on the exam, every score the question on the exam is worth one point. In order to pass the exam, you need to score enough points to meet the cut score, the threshold for passing.

So the pre-test questions are not scored. They do not count towards or against your total score. They are there so we can try them out, get some statistics about how candidates are performing on them, and then be able to make that decision about whether or not those should be moved into a scored status.

And that is a best practice standard within the testing industry. You've heard us speak a few times about staying up with best practices within the world of testing. And so pre-test questions are very common practice in a lot of standardized exams. And that is really a way of protecting you, the candidate, to make sure that you're not getting scored on just bad questions. So I think that covers why the pre-test questions are included.

The last part of this question was why are they ... I'm sorry, where are the pre-test questions located in the exam? So they are randomly located throughout your exam. They are not all lumped together at one point or another within your division. They are randomly spread throughout. You might have pre-test questions within your discrete section of questions. That is

the non-case study questions. You might have pre-test questions within one or both of your case studies.

So it is best to approach all questions as if they count, but know that some of them will not count, but you won't know which ones they are. So certainly approach all of them as if they are all equal scoring opportunities.

Jared Zurn [16:21]: So our next question is:

How many questions are scored compared to the old exam?

And so, again, we're back to that conversation about operational questions versus pre-test questions. And today in ARE 5.0, if we look at say, project planning and design, of the 120 questions that a candidate takes in the test center today, they would have 100 operational questions and 20 pre-test questions. They're not going to know which are which, so every question matters the same to them.

In the new structure of the exam, there's going to be just 100 questions for PPD and PDD. 91 of them are going to be operational questions, the other 9 are going to be pretest. And that kind of ratio is pretty consistent in how we've adjusted all of the divisions, where the number of operational items is decreasing probably by about anywhere from, like I said, 9 to 15 percent or so. Whereas the number of pre-test items, the percentage is decreasing much more dramatically.

Michelle Cohn [17:23]: All right, actually, these last two questions kind of go together.

Will there be any changes to case studies? And how many questions per case study will be on each exam?

And the reason is, the reason these go together, will there be any changes to case studies? Well, the only change that you will see as a candidate is actually just the number of questions assigned to each case study. The case studies themselves are continuing from what you would see in the test center. We'll continue to be having those same case studies in the future. However, the number of questions is changing.

So today in the test center, you typically would see 10 to 12 questions typically, per case study. Once we launch the online proctored version in mid-December, you will see more about seven to nine on average, questions per case study, and you will see two case studies on each of your exams.

Jared Zurn [18:20]: So that brings us to the end of all of our questions for this video. So thank you again very much for your time, and we hope this helped inform you.