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What You Need to Know About Advanced Level Certification

Why You Shouldn't Fear the Advanced Level Exams, and Other Helpful Tips

Q&A with certified tester Tom Adams

Editor's Note:

"Why did I wait so long to take my first Advanced exam?" That was the question veteran tester Tom Adams asked himself after taking his first ISTQB Advanced Level certification exam. Tom offers many other insights and helpful tips regarding the Advanced Level exams in the popular ASTQB podcast entitled, "What You Need to Know About Advanced Level Certification."

If you prefer to read these interesting insights, we have transcribed the podcast below, editing the spoken text for readability and clarity. This is must-read / listen information for anyone who wants to get ahead in software testing.

ASTQB: Today we're talking about ISTQB Advanced Level certification. We've invited Tom Adams, who has both Advanced Level certification and Expert Level certification. He has offered to join us today so we can answer all those "Questions about Advanced certification that maybe you are afraid to ask." So Tom, welcome to the program.

Tom: Thanks Dave, I do appreciate the invite. This topic is something that, whenever I'm talking with my fellow testers, it always comes up. It seems like it's definitely a topic of discussion every time I go to a conference. It is fun to talk about because there's a lot involved in it. So I really appreciate it.

Tom's Background / Testing Career

Can you give a little bit of background, just for context, in your your career history of software testing.

Well, I started way back in the "dark ages," if you will, doing basic QA and then a little bit of software QA but nothing really structured. But probably about 25 years ago I started getting involved in really structured software testing, starting with manual testing, like I think like most people do. Eventually I worked on doing automation. I learned some WinRunner and some LoadRunner, and I did a lot of that. I eventually worked on test management. And that's where I am now today — a test manager for a large enterprise. I cover five different major enterprise areas that I'm managing all the testing for. Acquiring the certifications has been an ongoing process for the last eight years. So it's not like I went out, took a month, and got all of my certifications. It was something I worked at systematically over time.

Should you fear the Advanced level exam?

Tell me about your path toward the higher level software testing certifications.

I'd say that my first obstacle to overcome really was a fear factor — kind of a fear of failure.

I had my Foundation Level certification. But there was a reluctance to step out there and go after my first Advanced certification. And so I'm trying to talk my

boss into sending me to training for the Advanced. He said, "Well I'll send you to training. But you know you'd probably pass the exam even without going to the class," because he knew my depth of experience.

It's interesting you say that, because I was a little bit surprised you of all people were fearful in the first place — because you did have that depth of experience.

I think it's kind of human nature. You say to yourself, "I'm doing okay now, do I really want to take that risk?" And so that first step broke the ice … I went to training and I got my first Advanced. Then I realized it really wasn't that scary — it wasn't that bad. And so then I got my next one, and my next one.

Looking back on it, you wonder, "Why did I wait so long to take my first Advanced exam?" Each person has their own things that they prioritized or that's going on in their head. So that was my personal obstacle. I really identify with people that are wondering about Advanced.

Are the advanced exams difficult?

Are the Advanced exams just incredibly difficult. Should you be scared walking in?

I really have two answers. The first answer is "Yes, they are difficult." But the second answer is "No, they're really not that difficult.

And here's why you have two answers. It's sort of like luck: The people who prepare tend to be luckier than people who don't prepare.

I would say if you properly prepare for each one of the exams, you're going to walk in and you're going to say, "Why was I worried about this?" because you know the material.

The exams are just made to try to determine, "Have you learned the material?" Well if you learn the material, you're going to pass the exam. Then you're going to look back and go, "Well it wasn't that tough."

But if you cram — you spend two days poring over the syllabus and then take the exam two days later — you may or may not pass. I'm going to say you probably won't pass. It's going to be incredibly difficult because you didn't prepare for it. You didn't really study for it, you didn't really learn the material — you just crammed for it.

I really think that's the core issue. We want the exams to be difficult in the sense that we want them to reflect an advanced level of of testing knowledge, right? So when an employer or somebody else looks at your ISTQB Advanced certification, they know that you know an advanced level of software testing. You bring that experience and knowledge to their business. We want them to feel comfortable and confident that this is meaningful. And we want your certification to be meaningful to you. So it can't be easy and still be meaningful.

On the other hand, we also want to be fair. There are no trick questions. It's just a matter of reflecting your knowledge of the areas. So if you do a normal job studying, and have some experience testing … but you don't have to be a 20 year expert to take the Advanced exam …

[ASTQB: Yes, you just have to have three years testing experience for the Advanced Level.]

… so if you've got your Foundation Level and you've spent three years of testing, and you prepare for the Advanced exam, you should have no problem passing it whatsoever.

How do these compare to the Foundation level exam?

How do the Advanced Level exams compare to that Foundation Level exam?

The nice thing is the latest way that both the ISTQB and the ASTQB have organized the syllabi. It used to be just one big giant syllabus. And basically your instructions were, "Here, take the syllabus and read everything, and then learn everything in it." Then for something like the Advanced Test Manager, the test would pull out the things that were relevant to test management and test you on those.

Because of this, there was no real way to know which areas you needed to concentrate on, and which ones you didn't. So that made for an extremely difficult process. That was the process when I was first took my first exam.

But now what they've done is they've said, "Look, there's three different exams, so we're going to have three different syllabi with three different sets of learning objectives.

So if I'm studying for, let's say, the Advanced Test Manager exam, I'm going to be focusing on things that a test manager needs to know. I'm not going to have to learn the things that are only going to be appropriate for, say, the Technical Test Analyst exam. So that makes it a lot easier to focus on the things you need to focus on for the one certification. Not everyone is going to be a technical test analyst, so why are we going to burden them with having to learn technical testing when that's not what they're going to be doing — that's not what we're going to be certified for. So it's really actually a much easier process than it used to be.

You had asked, "How do they compare to the Foundation Level exam?" So let me go back and actually answer that question. In the original Foundation exam, it was a broad overview of the entire area of testing. So you've got a little bit of test management, you've got a little bit of test analyst, and you've even got a little bit of the technical test analyst. But it was all at a fairly low level.

You need to know the terms, you need to understand the concepts, and those kinds of things. We want to make sure that you've got a good solid test foundation.

In these Advanced exams, they are going to go to the next step. They're going to say, "You not only understand the terms and the concepts — but you're able to take those terms and concepts and then apply them to real life testing situations, and come up with a correct solution." That's what the Advanced exam tests. And that's the difference.

Which advanced exam should I take? What is the right software testing career path for me?

How do you decide which Advanced exam to take?

As someone who is considering Advanced certification, I would go with the philosophy of "Begin with the end in mind." So just think, "Where do I want my career to go?" in the short term and the long term. In other words, I want to picture what I'm going to be doing five years from now.

Let's say I really want to manage and lead a team of testers. I can test obviously, I can do manual testing. But

I don't really want to sit there and do that, writing test cases all day and just executing testing — that just doesn't interest me. Instead, I really like testing as a whole, and I really want to help people do testing. I want to manage it. Then obviously I would say test management is more what you're looking for right now, and that should be your first Advanced Level certification.

On the other hand, you might think, "I hate paperwork and I hate HR. And I really don't want to tell Jim and Joe and Sue what to do. I just want to sit there and be left alone and test my stuff." In that case, you probably want to look first at Advanced Test Analyst.

If you're a programmer type person, or you've been a programmer, or you want to do programming, or you want to be able to go more in depth in the code — read the code and really get into a white box testing … if you really want to get in and read the code and construct your test cases based on the technical aspects of the code, well then, you're going to want to do Advanced Technical Test Analyst.

I would say also if you're going to be doing any kind of automation then you also need to be looking seriously at Advanced Technical Test Analyst. There's no way you can write effective automated code — that does a credible job of testing software and come up with meaningful results — if you cannot read code, and you cannot construct tests based on code. So if you're going toward automation, then you're going to need to go down the Advanced Test Analyst and then the Technical Test Analyst path.

If you really only want to do management and you want to be a test lead, and a test manager, and that's really your focus, then I would go first to the Advanced Test Manager.

What about mobile and agile certifications?

Do these lead to any of the specialty certifications such as Advanced Test Automation Engineering?

They do. The Technical Test Analyst will feed into the the Test Automation Engineering with that kind of the natural progression.

There are also two certifications out now that, while they're technically offshoots of the Foundation Level, and they don't have the tag of "Advanced," they really stick out for me: ISTQB Agile and ASTQB Mobile Tester.

Something I want testers to think about is that as you look at at job postings more and more, almost all them ask for agile experience. And then at the last conference I was at where they talked about mobile testing, they said mobile applications and platforms are probably, in the next five years, going to be as revolutionary to what we're doing in software as the Internet was 10 years ago or 15 years ago. There's going to come a point at which if you do not at least understand mobile testing, and how it's going to impact you, then you're going to be behind the curve.

So in the discussion of all these certifications, I don't want people to overlook the necessity of both agile and mobile testing, even if you think, "Our company doesn't do mobile. We don't have anything in the mobile business." Maybe that's going to be true. But I would say that in five years or so, there's going to be a whole lot of companies that didn't think they were going to do mobile that now, if they aren't on mobile, they're not going to be competitive. Really, what is a smart phone? It's a computer that happens to be able to make phone calls. It really is its own serious computer.

So while you're also working on some of your Advanced, you need to also make a plan for ISTQB Agile certification. And then also at some point in your future also the ASTQB Mobile testing certification — you're going to need that. I guarantee if you're planning to be a tester 10 years from now, you're going to need that ASTQB Mobile certification. You want to be able to tell a potential employer or your existing employer, "Hey by the way I'm ASTQB Certified in mobile testing."

If you're a manager or a director, you want to be thinking ahead as well, and make sure that your your test team or teams are knowledgeable in those areas as well. And this is really a time to kind of get ahead of the curve.

How do I prepare for the Advanced level exam?

Back to Advanced, let me ask — how do you prepare for the Advanced level exam?

Well, as I hinted at earlier, the great news is that the syllabus has been laid out in such a way so that you know what you need to focus on.

But also I'm going to give you a couple of tips that will help you study for the Advanced Level exams in a way that's even more effective.

It used to be, "Here's your glossary, here's all the terms you need to know." And it was a 60-page document of all these testing terms. There's no way anyone under the sun could have memorized all these terms and bring them all back for an exam. Well, what they did was they made notes in the actual document. So if you use the online, searchable glossary on the ASTQB web site, you can do

an Advanced Search for a type of certification, and return the terms just for that certification. Those are the ones you need to know, and all the rest of them you can just ignore for purposes of that exam.

Now obviously the one caveat is that everything in the Foundation is still testable in any of the Advanced exams. And there will be questions that go back to the Foundation material — it's completely testable — and I guarantee there's at least a few questions that actually go back to the Foundation. So, it's assumed that you know the Foundation material when you take an Advanced exam. So that being said, you still want to make sure you understand all your Foundation stuff, but then you can now concentrate on the particular Advanced exam that you're going to take. So the first one is the glossary, but it's already been coded for you.

And the second one — and this is a really big hint — you're going to have, say, the Test Manager syllabus. And it has all the material that is testable for that Test Manager exam. But, even in that specialized syllabus, not everything in that syllabus is going to be on the test. So here's how you tell what's going to be on the test. You actually read the document — and they have "learning objectives." So at the beginning of every chapter, every section, there's going to be a series of learning objectives. These learning objectives are what the ISTQB and the ASTQB have decided that, "Of this material, here's what we want you to demonstrate that you've learned in order to get our certification." And so, if you pull up a section it may have 17 pages, but maybe there's only three learning objectives. Well, of those 17 pages, you need to know the material that made those three learning objectives. Even this will save you study time.

The idea is that it is all helpful, and it's all good to read, but the things you really need to know are those learning objectives, and everything that relates to those learning objectives.

Should I take training for the Advanced level exam?

I read an article in the ASTQB newsletter written by someone who had taken and passed all of the Advanced Level certifications, and she said that she self-studied, read books, and did different things like that to prepare for the exams, and was successful. But in hindsight, she wishes that she would have received formal training because first, it's very difficult to self-study, and secondly, it would have been easier if she would have had some camaraderie, and she would have had someone guiding her through the learning objectives. What are your thoughts there?

I totally agree. And I think that the hindsight is very accurate. Like with my manager that I mentioned earlier, ("Well, Tom, I'm going to sign you up for the training. But you know you could pass that exam without taking a class."). Well, maybe. Of course I told him, "Yeah, of course!" — but I really wanted the training because he was more confident than I was at that time. But, I agree.

For one thing, if you're taking the Advanced training, the people that you're going to be with are also people that are very experienced testers. And so you're going to be in a whole different group of people for three to four days, and really develop — as she said, camaraderie — and sharing and passing notes, and comparing experiences, and just informally building those relationships. And, as well, you can help each other study for the exam, and you're more motivated. I think it's a little more motivational. I think you absolutely benefit from that.

In addition, the person who's going to be giving you your advanced class is also going to have a lot of additional

insights and things as he or she covers the material. And those two will help you not only pass the exam, but become more of an advanced level tester.

And when you know what it says on paper — but it doesn't really translate into, "How does this work in the real world?" ... for example, in my Technical Test Analyst class, they had some very advanced concepts in terms of selecting data sets to test certain types of code. At one level, "Okay, I sort of get it," but at another level I really needed the instructor to demonstrate to me how this really works in the real world: "In real code, here's the kind of data we're going to use." And then it made sense, and then I understood it, and of course then I passed the test.

But, yeah, there's definitely a benefit to having someone that you can — right on the spot — say, "I don't understand this, please go over it again." Whereas, if you're just sitting there, and you have the document on your own, you're going, "Well I don't really get it, but I have a 25 percent chance of getting it right on the exam anyway." Or you know — hopefully — the other questions will make up for it. That's not where you really want to be. You really want to understand the concepts, and I think being in the class really helps. So I would say I encourage everyone to take a class. Not everyone has that opportunity, so if if you don't have the opportunity to go, then self-study is what you have left. But if you do have that opportunity, I do believe it's totally worth it. Yes.

I've never heard anybody disagree with that concept. If you had any ability to take formal training, they are very happy that they did so. And as you noted, I think it's very easy when you're self-studying to think, "I probably understand it well enough," but there's no there's no way to bounce it off somebody else.

There's no way to check. There are people that I went to classes with back in the day that even today we still exchange emails now and then. And so we still have that professional relationship, which is really good.

Do you have tips for use during the actual exam?

So let's say you're feeling confident in your abilities, you have enough experience, you've looked five years in the future. You looked at some of the materials, you have taken this course, you're fully trained, and you're ready to take the exam. Are there any are there any tips for taking that exam?

Of course, there are just general test taking tips. I've been lucky in that I tend to test well, so I would say one of the first things is to just go through and answer all the ones that you know for sure, that are fairly quick and easy for you to answer.

Then I would do go back through. Because it is the Advanced Level, there are going to be some practical exercise type questions. So I want to go back through, and then I work on the practical exercise type questions where maybe you have to map out a functional diagram, or you have to fill in a decision table — things like that in order to answer the questions. Those are a little more time consuming, so those are the ones that I do next.

And then finally the third time I go back through. The ones that were kind of stumpers ... sometimes after you've gone through the whole exam twice now (because you've done the easy ones and now the exercise ones), sometimes then those come through and you understand them. It's like, okay you didn't understand the first time through, but now that I've got the context of all the questions, I get it and I think I know that answer, and you just go ahead answer it. Those are the ones I leave for last. And then just go through and get them now.

One tip that has nothing to do with knowing the material or anything else is, "You don't change your answer!" I

would say that on a risk management level, your chances when you change your answer are not good ... unless you have a solid reason why. I mean, you could be looking at it and go, "Oh, now I realize that that wasn't the right answer." Sometimes you may not realize exactly what they're asking. And so after you've gone through the whole exam, all of a sudden the wording makes sense and you go back and you change your answer. So, if you got a solid reason why you need to change your answer, then that's one thing. But saying, "I don't really know the answer but now this one feels better than the other." Don't ever do that.

The other thing is that I mentioned before there are no trick questions. However, there are very specifically worded questions. So if I could pound anything into anyones's head it would be, "Read the question." And actually read the question, don't just skim the question. Look for qualifiers, look for things that would make one answer valid and the other answer not valid.

So, if I'm struggling with a question, then what I do is I would take the context of the question, I would start with A, B, C, D ... I would start with A, "Is there anything in this answer that is disqualifying by any of the conditions in that question?" So I start disqualifying answers. Usually, then I come down to two answers. From there, again, think about the context of the question. Look for things that make one true and the other not the right answer. But again, that means you have to understand the concepts and how they are applied. So if you know the material and you understand the concept, and you understand the right processes, then that process of elimination should be a lot easier. Because you'll know "It can't possibly be this because of this other factor." That will help you eliminate the "distractors," if you will.

Why should you take the Advanced level exam?

What's the best part about having passed the exam? Why should someone take the Advanced Level exam — what's the bottom line for them?

In my case, I had a very selfish reason for taking as many certifications as I did, and that is my degree, education. So if I'm applying for a job in software testing, a very technical field, there could be an inclination as the employer is looking through the stack of resumes, and he says, "Well, here is Tom, he has a degree in education. And here is Joe and Sally, and they've got technical degrees in programming or whatever. So why would I take Tom with his education degree over someone with a more technical — or even a more recent degree?" The answer could be, "Well, yes, but Tom is literally certified in every type of certification in his field. And all these other two people have is their degrees, and they may or may not have any exposure to software testing at all."

The other part is that my degree isn't very recent. Let's say I had a technical degree from let's say, 1985. How valid is that today in the eyes of the employer? So maybe your degree is from 1985 but you have all of these certifications, that shows you've not only got your degree — or maybe you don't even have a degree — but you have applied yourself in the specific area you're applying for. You have successfully demonstrated your knowledge of software testing. I think that's a big benefit for a lot of people. For me, it really isn't worth it to go back to college and do it all again. It just isn't — the amount of investment versus the return just wouldn't make sense. So the way I made up for that is by really applying myself and getting several certifications.

Why should management support the Advanced level?

You've been at your current employer for quite a long time. So these certifications are not just for people looking outside their company for other jobs. I don't want to scare off an employer thinking that they will lose people by having them get their certifications. It really provides a career path — does that sound right?

Yes. When I first came here, I was hired to be a test lead for our web enterprise and e-commerce side. But as I developed and got more certifications, they were like "Well, maybe he could do this, too." And so I took on more responsibilities and worked my way up, so that now I'm managing the test efforts for five major enterprise level areas that are critical areas: international, e-commerce, backend, database, middleware and different enterprise applications. All those come under my testing management, and I don't know they would have felt as comfortable doing that if I hadn't demonstrated I had the knowledge to do it. It wasn't like I got my certification and looked for a new job, I applied it to the job I had at hand.

What is the next step?

You should certainly be inspired and confident to take the next steps toward Advanced Level, Mobile and Agile certification at this point. Take a look the "Software Testing Career Path" at www.astqb.org/road-map/ so you can choose the path and certification that interests you.

Learn more now at www.astqb.org
or contact us at info@astqb.org

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