

The background features a large yellow shape on the right side, which is a triangle pointing downwards. The rest of the background is white. Overlaid on the white area is a complex, abstract scribble of thin yellow lines, resembling a tangled path or a network of connections. The text is centered in the upper half of the image.

**A CHANCE,
NOT AN
OBSTACLE**



What is Polteq's involvement in this initiative?

Anja: Actually we were contacted by AuthentICT and Specialisterren. AUTHENTICT is a company who specializes in creating a working and learning environment where people with autism can offer excellent IT services. They approached us because we are the largest and most experienced independent test training organization in the Netherlands. We also had some experience with similar projects in the past. Over the years we have trained more than 60 people with autism. During the first training course we noticed that not all participants were completely comfortable with our normal structure of the day. But after a while you see the participants getting used to aspects such as the early starts and very full days; they start enjoying the new situation, the working environment and the software testing. It's such a wonderful experience to see such an important change! People thoroughly enjoy what they do and being part of the class. For us it's such a pleasure to support people and

help them to do things they are good at. Unfortunately in many cases people had become stuck in their previous jobs. We also noticed that the working environments in the past were not always suited to their needs. Our cooperation with Specialisterren and especially AUTHENTICT is aimed at creating a new opportunity, recognising the many talents and aptitudes of the individual. The programme helps to increase confidence in what they do and possibly even more important: they see how important their contribution is.

What specific skills do you identify and help develop?

In general people with autism are very analytical and persistent. They can maintain a good focus. It can be a challenge to find new issues in software and the testing can require a high level of attention to detail repeating the same manual tests multiple times – a new release of software that has already been tested by our students will be tested as thoroughly and detailed as if it was the first release.

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For more than ten years the Dutch social enterprise Specialisterren has been working with people with autism. Specialisterren recognises that people with autism have a variety of exceptional skills that are in high demand in the job market, most especially in IT and software testing roles. These skills include high levels of concentration, accuracy and close attention to detail, ability to spot errors, good technical ability and excellent memory. Through a network of recruiters and coaches, Specialisterren has successfully supported candidates with autism to find software testing roles and, through its cooperation with Polteq, has made available an extensive training and coaching program.

In conversation with the SQ mag Anja Bakker (manager education at Polteq) and Polteq trainer Erik Runhaar describe their experiences in working with people with some form of autism.

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How does Polteq work with the students?

Anja: For a number of years Polteq has been running a training program called the Masterclass. This is an intense seven week training program aimed at people who want to become a software tester. The training is multi-dimensional and includes all aspects of what makes a person a successful software tester. For mainly AuthentICT we have a similar program. Maybe the main differences are that we train at their location and that we have more but shorter days to reduce the stress level and for a better learning (and experience) effect. During the training for Specialisterren and AuthentICT we also work on building confidence and the work related skills, such as deadlines and team work.

What are the challenges for people with autism in the workplace?

Anja: If you put people with autism into an existing team, without taking into account that they may need more time or attention to connect with the team, then it may be a challenge for the person. You will have to make adjustments to help them feel comfortable (in their work) and appreciated as well as to help them overseeing what is expected from them. If you don't, then they will probably be less efficient or less motivated. In a way it's a two way adjustment: all members of the team need to adjust in order to make the team a success. The people we have seen in our training courses are practically all people who lost their job because the organization was not able or willing to adjust.

In our training courses we have seen people who were unemployed for a significant number of years since their last job. Some of them had worked for ten years or more without any problems but then, for example, they got the opportunity to get another position and to grow within the organization. That sounds great, but if the new job is in management with much more stress, interaction, meetings, uncertainties and issues then people with autism will face a real challenge. People with autism can be very successful students at university. They graduate with good results and then they get a job. The workplace gives new challenges including the social environment, making contacts, building re-

lationships, working with different colleagues and possibly new issues to deal with every day. In our experience people with autism can have excellent skills in computers and systems. Data entry, programming and testing are typical IT areas where people with autism can be very successful.

How can this initiative be more widely supported?

Anja: I think it is important that organizations are informed that people with autism can be excellent software testers. You need to create the environment which will work for them. That is why organizations like AuthentICT and Specialisterren are doing so well. They created an environment in which their employees can contribute. They have coaches to help them if they have a difficult day or they run into things they have problems with.

Erik, as a trainer, did you need additional skills?

Erik: In my private situation I am involved in working with people with autism. When Polteq was asked to provide training to Specialisterren and AuthentICT I was asked to deliver the training. I was asked to find out how it works when you train people with autism in classroom situations. People with autism are quite easily distracted. As a trainer you have to make sure that they can focus and that there is no distraction. If for instance I'm fiddling with a pen when explaining a topic, then participants may be distracted. Which doesn't mean that the topic was too complex or that I explained it badly; it's a matter of focus. The challenge for the trainer is more than in other situations react (and change course) on the group: how are they doing, reacting, focussing.

What is special about teaching people with autism?

Erik: The best thing to do as a trainer is to explain as explicitly and clearly as possible. Also do not go back on an earlier explanation. If you explain, for example, that testing is green and two days later you explain that it is red, a person with autism can become confused and even stressed. It can create



Training at Polteq with Eric Runhaar

they don't feel pressure time wise. Having an invigilator who is used to working with people with autism is also very helpful. In general we see very good results.

What have you personally learned from this project?

Anja: Our experience as Polteq is very positive – we are committed to developing good testers and we know that we have trained people who will be excellent.
 Erik: People have different levels of adaptability depending on the flexibility of the organization and situation. We see people with autism doing test coordination work working effectively with users having developed the necessary skills. Social behaviour can often be summarized in a set of rules. For instance when you want to make contact with people you first shake hands, then you drink a cup of coffee together and talk about some general topics and then you ask about someone's work or training. In this sense social behaviour can be learned. Some people with autism do this in a natural way and others have much more difficulty with it. They are for example better in solving computer or software related issues. Initially we wondered how employees from AuthentICT and Specialisterren would cope with a changing agile environment, but this is a challenge that can be met positively. I have done agile practises in a training environment which was very successful. They found failures and specific false combinations that other groups did not find. They really have attention to detail which helps quite a lot in finding failures. That is a very important aspect in testing, of course.

So people with autism can be very good software testers?

Anja: Yes, absolutely. In some ways they may be even better software testers, especially when testing details. Give them the responsibility and the right support and they will do a great testing job. ■

doubt in things learned previously, even some of the basics.

Erik, you train candidates for the ISTQB® Certified Tester Foundation Level (CTFL) exam for your customers Specialisterren and AuthentICT. What approach do you use?

Erik: Participants need more time to learn, because things are mainly not straight forward. In some sessions we did half a day of training with the possibility for them to repeat content or simply relax in the afternoon.

Anja: ISTQB® CTFL exams are usually one hour; ISTQB® allows extra time (candidates have 90 minutes in total if they need it). The main aspect is that



What is autism?

Autism is the general term for a group of complex disorders of brain development that affect how people perceive the world and interact with others. That's why people with autism have great difficulties with some "simple" things, while they sometimes handle easily "difficult" challenges.