

What is a “pre-vocational taster” like?

3 days in the lives of Abel and Mirjam

Made it! Arriving on time, Abel walks through the main entrance of Mechatronic AG and approaches the gentleman seated behind the counter marked "Reception". He gives his name, Abel Monteiro, and explains to the man in the suit that he has come to register for a pre-vocational taster. The gentleman looks at the computer screen in front of him and replies in a friendly tone: "Yes, they are expecting you. Please have a seat. Mr Braun will be with you shortly."

The first impression

Abel takes a seat next to a girl who looks about the same age as him. "Are you also here for a pre-voc?", she asks. "Yeah. You, too?" "Yes. I'm thinking of maybe becoming a design engineer."

At that moment, a young woman walks up to them. "Mirjam Rulic?" she asks the girl. "Hi, my name is Lisa. I am in the third year of training in design engineering and will be guiding you during your pre-vocational taster." They both shake hands and walk towards the lift.

No sooner have the lift doors closed behind them, Abel hears the quick footsteps of a young man dressed in red overalls. The man introduces himself as Mr Braun. "I will be showing you the ropes during your pre-vocational taster." "Good morning, Mr Braun," Abel replies. "Here is your badge. Come with me. We need to go to another building." The two walk through a small revolving door, which only opens when Abel places his badge on the door sensor.

Practical work

Standing at a bench vice, Abel files the battery case of a flashlight that he has taken apart following Mr Braun's instructions. Lisa and Mirjam approach across the factory floor. "You both already met at the front entrance. This is where the workpieces that we plan in the engineering design office are produced," explains Lisa. "We talk with the mechanical engineers, and they tell us, for example, how long work orders will take, which gives us an idea of how expensive the production process will be. Abel is already working on the flashlight that we included in our design schedule as an exercise, Mirjam."

Later that afternoon, Mr Braun shows Abel how to use a drilling machine. Abel is about to start drilling the first holes into the battery case when Mr Braun and Mirjam approach. "Hold on a sec. We have realised that the case length is too long to ensure clean contact with the batteries. We have changed the work plan. You now need to use the new length." Abel grins at Mirjam: "No problem!"

Better ask than to botch things up

Mirjam walks away and Abel takes a look at the new work plan. Confused, he can't seem to remember how they had marked the different points earlier that morning. He turns the diagram at various angles and compares it with the battery case. After awhile, he takes both the work plan and battery case to Mr Braun, who is programming a CNC lathe. He explains the changes that Mirjam has requested and admits that he can't remember how they had initially made the markings on the battery case. "It's good that you came to ask instead of drilling away," says Mr Braun. "Nobody expects you to be able to do this on your very first try. It actually happens quite often that the engineering design office comes down here later with a change in plan. You have to be flexible. Look, this is where you drew the baseline this morning. ..."

Just before 5:00 p.m., Mr Braun walks up to Abel: "We're about to pack in. Have you drilled all of the holes?" "Yes, it took me a long time to redo the markings and so I had to be quick drilling the holes. But I'll definitely remember how it's done." Mr Braun checks the holes and pats Abel on the back. "Good work!" he says. "See you tomorrow. You know how to get in. Don't forget your badge!" "See you tomorrow Mr Braun and thank you for re-explaining everything," replies Abel.

Taking notes

Abel sees Mirjam waiting at the bus stop. "You really made me work with those changes, Mirjam!" "Sorry. I didn't mean to. It's just that Lisa wanted to check to see if I was really familiar with the work plan. Then I had to write down everything in the logbook." Only now does Abel remember: His teacher had told him to keep a record of everything that he did and of how he enjoyed it. Because of all of the changes, he had completely forgotten. "Now, I still have a load of homework tonight filling in the logbook," he groans.

"So, how was homework last night?" asks Mirjam teasingly as Abel gets on the bus at Lindenplatz the following morning. "Yeah, I was so tired that I fell asleep watching TV. This has never happened to me before, but I suppose that standing up the whole day made me tired. I wrote that down, too, in my logbook by the way." "I wrote that I could very easily imagine where the tick on the battery case was and that I had to work very carefully on the computer to adapt the work plan," Mirjam explains. "When are you having your lunch break?" Abel asks when they get off the bus. "Why don't we meet in the cafeteria?" "I don't know yet and I can't send you texts. I'm only allowed to use the cell phone during the break and after closing time," she replies. "Maybe at 12:30 p.m.? Lisa always takes a late lunch break."

The second morning at Mechatronic AG goes by quickly. Abel has sunk all of the drill holes and observed how Mr Braun milled the workpiece. Before the lunch break, he even had enough time to write an entry in his logbook. He didn't see Mirjam in the cafeteria and had lunch with Mr Braun and two mechanical engineers. He is now already back at work. Using an old lathe, Mr Braun shows him how to turn a shaft and then asks him to give it a try. It's really difficult when each hand has to do something different. Abel's cone is not exactly straight, but Mr Braun tells him that he'll learn how to do it soon. And his cone isn't all that bad really.

Abel asks Mr Braun if he can use his cell phone to take a photo of the old lathe for his logbook. "Now that is a practical use for a cell phone," replies Mr Braun and suggests to Abel that he also take photos of the drilling machine that he used the day before.

Communication and cooperation

On the third morning, the bus doesn't come: Abel is late! Fortunately, Mr Braun has given him his cell phone number. Abel calls straight away. "Don't worry, Abel, I'm sure that they have more important things to worry about. Glad you called though. Communication is important." When he finally arrives, Mr Braun shows Abel how to cut a wire. He then asks Abel to cut both wires on his flashlight. Abel has never had to work so precisely before. No sooner has he tightened the screws on the flashlight than Lisa and Mirjam walk in. They want to see how everything works. Abel is proud that the battery case slides right into the tube. The length is exactly what it should be and the flashlight turns on without a loose contact. Mr Braun congratulates him for his precise work, and all four shake hands because this has been such a successful team effort.

In the afternoon, Mr Braun talks to Abel about the pre-vocational taster. "I've been pleased with your work. I noticed how carefully you went about your tasks and I liked how you approach things. I can easily imagine that you could become a good mechanical engineer," he says. "Let us know if you would like to do an apprenticeship with us. Your attention to detail is impressive."

Mirjam also receives praise from Lisa: "I was impressed with the way you managed to visualise the battery case. I also liked the way you took charge of the situation. We could use design engineers like you!"