

Long read: Mr Spock, Pippi Longstocking and the fairytale of the self-directed learner

12-15 minutes

The e-learning industry has sold us a fairytale when it comes to self-directed learning. Learning transfer cannot happen in isolation – the human brain is far too complex for that. In this long-read article, Dr. Ina Weinbauer-Heidel and Dr. Axel Koch explain why we all need support when it comes to ‘learning to learn by yourself’.

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Before we discuss the fairytale of the self-directed learner, let's begin with a story of our own. Margret is a personnel developer at a retail company. She's just finished a six-month project, uploading 30 videos to the company's learning platform on 'best practice tips for sales'. The [e-learning](#) consultant has filled it with quizzes and interactive elements.

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It's launched during a sales conference. Every week she sends out a link to a selected video to encourage the salespeople to use its extensive know-how. With bated breath, she follows the user numbers on the dashboard. Hardly anyone is interested in the videos. She wants to hit the table in frustration. Her sales colleagues had happily welcomed the project at first, but now she keeps hearing the complaint: 'how am I supposed to find time for this in my packed day?'

Many L&D professionals will relate to Magret's situation. On the one hand, digital tools have offered us great opportunities to shape learning and give employees exactly the knowledge they need for their work. On the other, many of these are hardly used. They stand alone on the learning platforms, like garden gnomes in front of your house.

Wishful thinking

Business for e-learning providers is booming, not necessarily because it's effective, but because to a large extent it fulfils wishful thinking. The thought is, 'if we give learners the appropriate knowledge, they will use it in their own interest'. It's just as fanciful as the idea that we can send them to a seminar room with a trainer and they will have internalised all that learning after one day.

The idea is that if you provide the tools, learning transfer will happen automatically. The e-learning industry's promise is reminiscent of Google – simply enter the search term, and the required knowledge is just a click away. So we don't need learning transfer anymore, or do we? Clearly, knowledge is automatically learned, and that learning is smoothly integrated into everyday life.

We used to have to travel for face-to-face training, now all we need is the company's internal 'learning world', where the learner finds everything they need for their work. After all, they are self-directed learners who consistently and independently continue their education, pulling learning resources from the platform, working through them and then, of course, implementing them in everyday work. They learn where and when they want – while waiting for a bus, or in the bathtub, or in the evening.

Is that true? Data and experience provide a different picture. It is not unusual to see dropout rates of 80% for e-learning. Recently, a [study by webinar provider GoToWebinar](#) showed that even in training webinars, the webinar window is not the main window on the screen 71% of the time. Online shopping may be more interesting than self-directed learning.

What's wrong with the students?

There appears to be a gap between knowing and doing. In a [study by Graf, Gramß and Heister \(2016\)](#), almost all participants (98%) stated that they were aware of the importance of learning due to changing requirements. In addition, 63% of those surveyed said they were happy to take responsibility for their further development.

Despite this, they routinely failed in their learning efforts and implementation. Thus, only 27% saw high transferability and only 23% saw perseverance in themselves. About half of the respondents said that they find it difficult to start learning (49%) and 56% said they found it difficult to integrate their learning into their working hours. In addition, 41% of those surveyed said they need pressure from outside to learn. The authors therefore concluded that, "self-control of learning processes has not yet become established among employees". According to brain researchers, this is completely logical.

Mr Spock and Pippi Longstocking

It is no wonder that we do not always learn what we are supposed to, and do not always implement what we set out to do. Yes, we all have a self-directed rational learner in us, but we also have a somewhat wilder learner in there.

Harvard professor Cass Sunstein strikingly calls the rational learner in us 'Spock', named after the Vulcan character from Star Trek. Spock is analytical, thinks clearly and categorises right from wrong. This part of us knows why it makes sense to deal with a certain subject matter, for example compliance guidelines. If he had his way, we would sit down and learn because, rationally speaking, that is the right thing to do.

There is, however, still the other learner in us that we'll characterise here as Pippi Longstocking, named of course after the cheeky schoolgirl with pigtales from Astrid Lindgren's books, who often lives by whims. Her motto is, "I create the world around me just as I like". Pippi loves things that are easy and immediately make you feel good. She does not communicate with rational arguments, but with somatic markers – her gut feeling says "yippee" and "boo" in seconds.

The responsiveness of our rational Spock cannot keep up with this. Learning compliance guidelines? "Boo!" cries Pippi. While the Spock in us is still going through the arguments about why it makes sense to learn compliance guidelines, Pippi has long since picked up her smartphone or is taking a coffee break with her colleagues.

So we realise with relief, it's not a sign of incompetence if we once again do not do (and learn) what we have set out to do or what the company has set out for us to do. It is completely normal, human and natural.

Taming the Pippi Longstocking in us all

What, then is the solution to this? How can we get the Pippi Longstocking in our employees to do self-directed learning?

One school of thought says, 'let Pippi rule the world!' (or at least the continued development world). The solution is relatively obvious – more infotainment and gamification. If a funny Tik Tok video breaks all viewer records and even kids can watch entertaining infotainment on YouTube, then this should also work for business learning.

This is easier said than done, however. Infotainment and gamification have their limits. Not every employee has the time and inclination to acquire knowledge in this way. Larger and more complex topics are also difficult to cover. Moreover, this approach cannot be replayed endlessly, as it wears thin and loses its fun factor. Even if fun content is consumed, this does not immediately mean that this content will be learned or applied. Learning always includes doing something with the content – there's an experience with it, where learners practice something and leave their personal comfort zone.

Parents homeschooling their children during lockdown will have experienced this. A hip YouTube video might explain to schoolchildren in an ingenious way how to do long division, for example. The video ends and, whilst dividing was consumed as information, the child has not yet applied it to 20 of their own divisions. The Pippi in the child would much rather watch the next (automatically starting!) YouTube video, instead of struggling through the learning experience. It takes mum, dad or the teachers to awaken the interest and intrinsic motivation for certain topics and to encourage the child to not give up at the first sign that it 'doesn't work'.

Even this small example makes it obvious that passing on or making information available is only a small part of learning. Without getting Pippi on board, it is guaranteed not to work (for long), and not without Spock either. That's not only true for children – it applies to us all.

Spock support for learners

In order to develop our inner Spock, therefore, we need [learn-coaching](#), to help us direct ourselves. The development of digital learning assistants and AI that can perform these tasks is in full swing. Strictly speaking, however, we all already use a sophisticated form of Spock support, quite intuitively and without large investments – the power of social support.

Those who play sports or attend weight loss groups will attest to this: if it really is important to us, we need other people. We turn to friends, colleagues, and professional coaches, who accompany us. Social learning such as working out loud or communities of practice are becoming more and more established. It is other people who let our inner Spock develop beyond ourselves.

Many people currently miss the social glue and group dynamics of the traditional training room painfully. They notice that they are much more easily distracted in webinars than in face-to-face training. Exercises that they would complete in the seminar room with the help of a dedicated trainer, they simply click away from in the digital learning room.

Through the social glue of the group, learners have more perseverance because the group and a dedicated trainer accompany them with motivation and operationally through the crucial learning experience. The group and the trainer help our inner Spock to interact skillfully and harmoniously with our inner Pippi – both with effective learning and implementation.

Learning to learn by yourself

In addition to social support, the ability to learn by yourself can also be strengthened directly. At this point, two scientifically developed concepts, which are similar in principle, but have a different focus, are applied. One is the [Learning Competence Analysis by Graf, Gramß & Edelkraut](#) (2017), the other the [Transfer Strength Analysis by Koch](#) (2018). Both approaches use analysis to measure how learners fit in and make recommendations to optimise learning.

While the Learning Competence Analysis focuses on learning styles, learning preferences, the individual's learning management and the general learning environment in the company, however, the Transfer Strength Analysis focuses on the factors that influence the transfer of learning. It is primarily concerned with behavioural learning and the successful, self-directed implementation of new patterns of thought and behaviour, for example in the context of soft skills development.

With both approaches, companies can comprehensively record what their 'learning or change DNA' looks like and, on this basis, control learning in the company in a needs and learner-oriented manner. At the same time, they can build up important learning skills so that employees are on an increasingly higher level of self-directed and self-responsible learning.

The Transfer Strength Analysis is a measuring tool that can also provide proactive transfer support. On the basis of the agreed results, it is possible, for example, to derive exactly the right measures to promote the effective implementation of what has been learned against the background of the [12 Levers of Transfer Effectiveness](#) (Weinbauer-Heidel, Ibeschitz-Manderbach, 2016).

Managing effectiveness instead of believing in fairytales

Effective learning and effective transfer do not usually happen by themselves. We all have an inner Pippi Longstocking acting according to the pleasure principle. She lets herself be carried away by play, fun, infotainment, gamification, or other people. We also carry a self-directed learner within us, however. We just have to get to know this inner Spock better and perhaps strengthen him at one point or another, whether that's through systems such as the Learning Competence Analysis, the Transfer Strength Analysis or the 12 Levers of Transfer Effectiveness.

Learning and application usually needs Spock support, and this is a rather rare commodity. If we believe that it is enough to put a few videos on a learning platform in order to collectively change behaviour in the company in the long term, then clearly we believe in fairytales. While we have nothing against fairytales, in reality we have to take change into our own hands. We cannot leave the happy ending of continuing professional development to chance – we must consciously control it through transfer tools and interventions.