Chapter 1 - Competence, learning and teaching

Why care about adult education?

Looking at the environment of both large and small organisations and companies at the beginning of the 21st century, it is easy to identify at least some important characteristics:

Changes are coming faster and faster. In fact, time itself seems to be running faster and faster, outdating existing know-how in an ever increasing rate. The increasing level of digitalisation, too, requires a continuous leverage of competence.

Modern organisations and companies may cope with a continuously developing society by reorganising, thus forcing their staffs to be more and more disposed for quick changes and constant evaluation of their own performance. By the same token, research and development is more and more becoming real core business.

A typical way of coping with these challenges is to invest in knowledge. "Eventually, competitors can almost always match the quality and price of a market leader's current product or service. By the time that happens, though, the knowledge-rich, knowledge-managing company will have moved on to a new level of quality, creativity, or efficiency. The knowledge advantage is sustainable because it generates increasing returns and continuing advantages. Unlike material assets, which decrease as they are used, knowledge assets increase with use: Ideas breed new ideas,

and shared knowledge stays with the giver while it enriches the receiver. The potential for new ideas arising from the stock of knowledge in any firm is practically limitless – ", Davenport and Prussic, Working Knowledge, p. 17.

In order to better understand the implications of such a panoramic view on education within organisations and enterprises, we have to have a closer look at education and the concepts linked to it.

The three concepts that make up the contents of this chapter are,

- Competence
- Learning
- Teaching

Competence is what it is all about, as mentioned above. But what is competence? We have to be clear about what we mean by this concept, as the whole purpose of this book is to be a help for all kinds of professionals in their competence development.

What is competence?

Clearly, 'competence' means a variety of things. It is a concept composed of many different parts. To have a certain competence might mean that you have got a certain education, e.g., a university degree. Or, when a company introduces a new set of products, the human resource department might initiate a 'competence shift' for all its employees. Or, a trainee might say that he or she has the competence to apply for a specific work task. These examples show the concept as a clear-cut intellectual perception, independent of its existing contexts.

In this book competence is dealt with as the ability to perform professionally in order to achieve high-standard goals. So let us bear in mind that we aim at competence that is linked to its context, the overall goals of organisations and enterprises.

Competence as the ability to acquire and develop knowledge

Formal competence tends to be a purely knowledge-based competence. A person is thereby considered competent when he or she has got the right academic qualifications for a position. An example is the engineer who is considered competent when leaving technical university.

Of course, there are lots of educational programmes who do a lot of practising, but in the end a formal exam points at the amount and the level of knowledge a student has acquired. In many cases formal competence is considered as a rough measure of intellectual ability.

However, knowledge must be set to work in order to become competence. What about a teacher who has passed his exams, but has not yet taught any classes? Or what about an instructor who runs classes with the right 'academic competence' but always with students being dissatisfied with his or her way of teaching? This person is obviously not competent for his profession. The best one can say is that this instructor is performing on a trainee level.

One might ask whether the above quotation from Davenport and Prusak is an example of a mentalist approach. It could be, but as their book is called Working Knowledge, they clearly interpret it as much more than academically derived learning. It is about behaviouristic knowledge, as discussed below.

Competence as the skill to act professionally

When an employee adds value to the products or services this person is engaged in, he or she shows the ability to perform a certain job in a professional way. Enterprises and organisations are supposed to make profit, to shorten lead-times, to provide health care, etc., and employees are competent only to the extent that they contribute to these goals. Academic knowledge must become transformed into working knowledge, into efficiency, i.e., more effective performances with higher quality. In this sense quality and efficiency become relevant measurements of competence.

A competent employee is a professional contributor. More than that, competence demands not only knowledge transformed into performances, it also demands the development and sharing of knowledge. Thus, competence is a very dynamic and flexible concept. It also opens up for valuing experienced based knowledge, and it opens up for different ways of performing professionally. These differences may be due to different personalities, but they are also dependent on the available tools to perform professionally, on organisational processes, on leadership and on other given conditions. On the other hand, it is clear that, if an employee's formal training cannot be used for a given work assignment, you cannot call him or her competent for that task.

Competence is the ability to perform professionally

Competence as the willingness to perform professionally

"Competence is not determined only by what people know or understand, but also by what they can do (skills), what they have the courage and will to do and who they are (personality and attitude)," Swieringa and Wierdsma, Becoming a Learning Organisation, p.19.

As the authors of the above quotation point out, this in no way undermines the importance of knowledge and insight. Knowledge cannot be overestimated when talking about competence. It is a 'conditio sine qua non'. But it is not the only essential part. One can e.g., think of a teacher who knows his subject very well, and who has also proved to have good instructional skills. However, this teacher keeps finding reasons why he should not run his courses. As it is impossible to force a teacher to run successful courses, the training staff must have some patience. However, when this instructor's reluctance to run courses goes beyond reasonable limits, he should be removed from the training staff. The reason is clearly his lacking competence, not due to lack of knowledge or lack of skills, but due to the lack of willingness and commitment.

Organisations have different ways of acquiring competence

An organisation may use different strategies to acquire the competence it needs in order to reach its goals.

- It may employ new potentially competent people, and perhaps lay off other people who are less competent.
- It may temporarily source the required competence by hiring consultants from outside the company.

- It can invest in competence development of their own existing staff.

One could argue for all three strategies, but in the rest of this chapter only competence development is at stake.

What is learning?

To learn is "to gain knowledge of a subject, or skill in an activity, by experience, by studying it, or by being taught", Longman Dictionary of contemporary English. This definition describes 'learning' in terms of a process. It is a process in several stages, the act of learning (gaining knowledge), memory and recall of what is learned.

Note that this definition of learning focuses on the 'gaining of knowledge', as the outcome of the process. In the discussion about learning in this book there is focus on yet another deliverable of the process, and it is of highest importance. A profit-driven organisation expects value for money. This is discussed extensively in chapter 3 Learning objectives. Now, it is time to have a short look at different ways of approaching the concept of learning.

A cognitive view on learning

As seen above, we spontaneously tend to think of learning as the activity whereby we 'gain knowledge'. This could be visualised as a number of cognitive elements that we put into our mind with a bigger of smaller effort. Sometimes, this model also implies some mental activity, sometimes it is entirely passive, just receiving a flow of stimuli. This view is the base of the 'vehicle paradigm', discussed in chapter 2, Paradigms in education.

A behavioural view on learning

"Learning is behavioural change", Swieringa and Wierdsma, p.19. This quote is in no way meant to diminish the importance of 'gaining knowledge' in when talking about the concept of learning. It is an underlining of the fact that learning is much more than a mental process. Learning must have effects on our way of acting. If our learning has no impact on our life, then we have learned nothing. As it is put in the old saying: "If you intend to learn something on Monday, but nothing has changed on Tuesday, then you have learned nothing on Monday".

By linking knowledge to behaviour, learning becomes a clear part of the concept of competence. It is also clearly focused on the output of learning, the changes in behaviour. As it is put by Swieringa and Swieringa, p. 19, "Learning is the changing of behaviour. The goal of this change in behaviour is to arrive at a form of behaviour which corresponds better to the goals of the learner; in other words, behaviour that is more effective. We call this competence".

Learning is the changing of behaviour in order to become more competent

A proposal to measure learning

Being a part of the competence development process, there is a need to be able to measure the output of learning. To ask for it as a delivery of a number of mental packages might be like putting your hand in a hornet's nest, difficult to grasp. In this book, the proposal is to describe 'learning' as the difference between two behavioural measurement points.

When there is a difference between the first measurement and the second measurement of knowledge, skills and or attitude, a difference that can be described as a step towards becoming more competent, this difference is called 'learning'. Refer chapter 10, Evaluation and assessment.

What is teaching?

There are many ways to learn. All of us learn quite a lot just by living. We do things, socialise with people and use our senses. In this way, we learn a lot about our world, our fellow-people and ourselves in daily life, mostly without even noticing that we learn something. It is a very unconscious and ad-hoc way of learning.

There is also the old 'trial-and-error' model. You try and try to find a solution for a problem, and all of a sudden you have found it. This learning takes place at random. It may be very consciously undertaken, but it is not very well organised.

We can learn by asking other people, e.g., professionals, to guide us. We become their apprentices and we learn by doing. Here we are close to what formal teaching should be about, creating the best possible conditions in order to make learning possible.

As for adult learning, grown-up people can also leave their 'real' world for a while and participate in education, e.g., in training labs and competence development centres. Here professional people plan for systematic a build-up of the learning process. They speed up the learning, as they avoid trying a number of options that do not lead to success. Thus, when this is consciously done, planned for by professionals, with or without us, formalised in a curriculum or the like and managed by a professional, we can say that this learning

is 'instructor-led'. Teaching is the leading of this learning. Teaching is 'facilitating learning'. And in a modern society, this must be done professionally. When the known author of the book 'The Learning Revolution' (1994), J Vos cries out "Don't teach me, let me learn!" she clearly points to the fact that unfortunately there is also teaching that does not facilitate learning.

Teaching and educating

Hence, the objectives of teaching are always essentially subordinate to the objectives of learning. If there is no learning taking place, the teaching has no point and is a complete waste of time from competence development point of view.

Of course, nobody else can do the learning for you, but teaching can be a powerful way towards more proficient learning. In the perspective of this book, education is what links teaching to learning. "The most that others can do is to help with learning, and this is what we call educating", Swieringa and Wierdsma, p. 28.

Learning and teaching relate so closely to each other that they sometimes become mixed up. This is not incidental, it is given by their essential relationship. It is illustrated by the fact that in the Nordic countries people use the same word for learning and for teaching – lära -. The only difference is the following preposition, 'in' or 'out', - 'lära in' versus 'lära ut' -. It is as if the learning goes out from one person and in into the other person. In these languages, learning can also be referred to by using the verb in its reflexive mode - 'lära sig' -, which means that learning is the same as teaching oneself. In Dutch, to give another example, the word 'leren' also means both to learn and to teach, depending on its

perspective. In Latin the word for teaching is 'e-ducatio', i.e. leading someone out on his or her way, while the classic Greek word for learning, $\mu\alpha\nu\theta\dot{\alpha}\nu\omega$, has a reflexive connotation, 'coming to realise'.

To summarise: the teacher's role in competence development

As we have seen, organisations and enterprises need competence, i.e., employees who perform efficiently, professionally and with high quality according to the given standards and goals.

Learning is an excellent way to build up this competence and does so where necessary by the changing of behaviour towards the goals that are set up by the enterprise.

Teaching is facilitating another person's learning process.

Therefore, the teacher's role is very humble one. But it also is a most powerful role, to become the enabler of learning, a strong performance enhancer.

To be competent is to be able to perform professionally

To be a learner is to become more competent

To be a teacher is to be the facilitator of learning

The Learning organisation

By using the concept of learning this way, it is also possible to have a talk about organisational learning. Organisations do not have minds, only individuals do possess the intellectual capability of learning, in the sense transforming data into knowledge and competence. The concept of 'organisational learning' seems to be a contradiction in terminis. This paradox is solved when one takes a look at what organisational learning means. First we must have a quick look at what is meant by organisational behaviour. This is the set of rules for the interaction within the organisation, both inwards and outwards. These rules are explained by a number of outspoken and/or hidden visions about what the organisation is working for. The changes in collective behaviour that are referred to as organisational learning are based on changes in its rules. So when a car company is unmasked of cheating with its exhaust emission tests, everybody knows that there is an organisational lesson to be learned, a need for change of some of the company's basic rules. Maybe even a need for a cultural revolution or an entirely new way of thinking, a paradigm shift. Thus organisations do climb up the competence stair, refer chapter 4. During history from the industrial revolution to our information age, we have seen the rise of knowledge organisations and companies, that deliver products and services in which competence is a more and more essential part. To give some examples, an international truck factory that nowadays defines itself total transportation service deliverer to its customers rather than a constructor of vehicles, a modern railway company that offers travel experiences instead of just train tickets, a telecom industry that has changed from being a producer of mainly hardware to becoming a deliverer of almost pure intelligence services on the internet software platform.

Making organisations' behaviour more effective, having them to learn, is one of the main objectives of Swieringa and Wierdsma's book 'Becoming a learning organisation'. They even discuss how they can learn to learn, not only in single-loop, but also in double-loop and even in triple-loop learning. This is also described in the book about learning loops, written by Argyris and Schön, Organisational Learning.

The decisive point not to discuss organisational behaviour any further in this book, however, is because it focuses on instructor-led learning done by individual students.

Note

This book, although utilitarian in its perspective, has no ambition at all to engage in philosophical questions, however interesting. It does not address the old questions about the essence of 'knowledge', e.g., what it means to know something, nor the elusive one how it is possible to get knowledge of anything at all, or about the implications of claiming that a certain statement is true or not. Neither does it challenge the value of seeking knowledge for its own sake, free and independent of other interests, not even when done for one's own pleasure.

References

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