# Chapter 35 The Real Professional is a Learning Professional

P. Robert-Jan Simons and Manon C.P. Ruijters

**Abstract** 'Professions' were called "learned professions in ancient times." Since then professions and professionals have played a continuing, but constantly changing role, in our organizations and society. Despite the amount of vagueness and ambiguities, the concept of 'professional' remains popular. It has been used as a standard, a demand, a defense and as an attack. It is also a concept with many definitions and many connotations and denotations formed by history and social contexts. Many authors have even suggested abandoning the notion of professional as a conceptual tool. We think that it is time to give this concept new clarity, use, and interpretation, fitting better within our time and, most of all, providing value to our work systems. In this chapter, we harvested what history has taught us in order to find a different mindset, to further define and contemplate the professional. Our main tenet is that professionalism is a self-chosen characteristic that is closely related to learning. From the literature, we derived eight characteristics of professionals and connected these to learning. The question of who is and is not a professional has fundamentally changed, going from learned professions to learning professionals. Finally, we present a model of different ways of learning that learning professionals need, both individually and collectively. The chapter ends with implications for theory, research and practice.

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Concepts such as professional, professionalism, professional development and professionalization play important roles in our organizations and societies. These roles are more important than we tend to think at first consideration. And these, "... notions of 'profession' and the 'professional,' as they are used in society generally, are slippery and ambiguous ones that can create unfortunate confusions..." (Watson 2003, p. 94). With this sentence, Watson characterized the core of an issue which, in current theory and practice, has more impact than to be expected of a concept. Despite the amount of vagueness and ambiguities, the concept of a 'professional' remains popular. It is used as a standard ('I think this is unprofessional'), as a demand ('You should handle this professionally'), as a defense ('as I am a professional, I have a right to a certain amount of space, unpredictability, autonomy') and as an attack ('they don't accept management'). It is also a concept with many definitions (Evans 2008; Friedson 1986, 1989; Schinkel and Noordegraaf 2011) and many connotations and denotations formed by history and social contexts.

'Professions' were already known in antiquity (e.g., divinity, medicine, and law). They were called 'learned professions' (Perks 1993). Since then, professions and professionals have played a continuing, but constantly changing role, in our organizations and society. Due to the vagueness of the concept, more than once, it has been suggested to abandon the notion of profession as a conceptual tool (Bourdieu and Wacquant 1992; Watson 2003). However, practice and history have shown a different outcome, possibly due to the longing for "good work" which forms the starting point and core of professionalism. As Schinkel and Noordegraaf (2011) stated, "Professionalism refers to the occupational behaviors and practices of workers who not only have full-time jobs but also possess a clear sense of what their work is about and when it is effective. Some sort of collective – traditionally called a "profession" – guards and maintains this self-awareness" (p. 68).

As such, it is time to give this concept a new clarity, use, and interpretation, fitting our time and most of all, providing value to our work systems. By this view, the question of who is and is not a professional has fundamentally changed from how to stay a professional to how to move from learned professions to learning professionals.

In this chapter, we harvested what history has taught us and explored the denotations and connotations of professionalism. We then confronted these findings with the current main discourse. On what issues do different scientists agree? Which key points can be deducted in order to find a contemporary view of professionals? In the second part of this chapter, we then elaborated on the implications of this new view for professionals and organizations. Our main tenet is that professionalism is a self-chosen characteristic that is closely related to learning. Lastly, we expanded the ways of learning that learning professionals need, using a model of islands, bridges and polders, as developed previously.

### 35.1 Analysis of Denotations and Connotations

What has history taught us (Crook 2008; Evans 2008; Friedson 1986; Schwab 1965) about concepts of profession and professional? We give an overview of the different connotations of the concept of profession in sequence and explore the (apparent) contradictions. Most of these stem from the work of Friedson (1986, 1989, 2001), with the addition of other reviews or position papers (such as Evetts 2003; Gardner and Shulman 2005; Larson 1978; Schinkel and Noordegraaf 2011).

### 35.1.1 Positive or Negative Connotations

The concept of profession finds its oldest English denotation before the sixteenth century. To profess then referred to a declaration, an expression of purpose. The concept was used in clerical foundations of the medieval university, and had in its origin a positive sound, "He professes a certain point of view." The same word, however, was also used in the meaning of, "He professes to know nothing about it." Although 'profession' seems a neutral concept nowadays, the related concept of professional is still subject to admiration as well as ridicule (Gardner and Shulman 2005; Larson 1978).

#### 35.1.2 Exclusive or Inclusive

A profession was for a long time a name earmarked for a specific set of university-schooled occupations: divinity, law, medicine (although not for surgery). All of these were occupations for the well-born. As a consequence, these professions found high regard. This regard was not due to the profession in of itself, but to the people practicing it. During the same period, the general use of the word as a synonym for occupation emerged (Wilensky 1964). Since then, there has been fast growth of professions and a growing dispute on the issue of what is and what is not a profession. Many laypersons agree teachers and nurses are professionals, but are in disagreement about the professionalism of politicians or artists. And what about managers (Gardner and Shulman 2005; Watson 1913)?

### 35.1.3 Sophisticated or Ordinary

Somewhat later in history, the word was used to distinguish a professional from an amateur. It is important to realize that being an amateur started as something favorable: being able to do something simply for the fun of it, not depending on it for living. Professionals in contrast, are working for their money. Even though they are

working for the higher good, this was seen as very 'ungentlemanly.' The Oxford Dictionary of 1971 wrote, "disparagingly applied to one who makes a trade of anything that is properly pursued for higher motives" (pp. 2316–17).

### 35.1.4 High or Low Quality

The contrast between a professional and an amateur makes the dedication and motivation of the professional suspect. However, what makes professionals respected is the quality they deliver. In this regard, the distinction between an "amateurish job" and a "professional job" is illustrative. As such, the quality of a professional is worth paying for. This difference in interpretation led again to a wide use of the term profession. Larson (1978) has written extensively on this issue and the consequences it brought:

The conditions of professional work have changed so that the predominant pattern is no longer that of the free practitioner in a market of services, but that of the salaried specialist in a large organization. In this age of corporate capitalism, the model of profession nevertheless retains its vigor; it is still something to be defended or something to be obtained by occupations in a different historical context, in radically different work settings, and in radically altered forms of practice (p. 18).

### 35.1.5 Title or Sobriquet

In the beginning of the nineteenth century, the connotation of the word professional had been turned up-side-down so many times (for example it was also used as: 'a professional partygoer') that researchers did not want to be known as professionals anymore. The John Hopkins University for example, described their mission as, provides advanced instruction, not professional, to properly qualified students in various departments. Evetts (2003) described the tension between vilification on the one hand and adulation on the other hand very clearly. In the end, the scales tip in the positive direction because of the growing importance attached to knowledge.

### 35.1.6 Highly or Less Highly Educated

In more recent years, the word professional has mostly been used for people educated in a specific kind of organized and institutionalized knowledge, both in a theoretical and a scientific sense. It has to be more than mechanical knowledge. A dentist has also been incorporated in this connotation, probably because this profession is not only manual, but has a scientific basis. The debates in this period deliberate about the level of education needed to be called a professional. In recent descriptions, as in Webster, you find that education on a specialized institute is

sufficient and higher education is no longer a prerequisite. The emphasis is placed on professionals being knowledge workers, people for whom the 'production of knowledge' is more important than the ability to carry out physical labor (Weggeman 2007). "It refers to more than dignity, prestige and status and the possession of formal knowledge, implying a process of social control of professional behavior as well as institutions by which the process is carried out" (Friedson 1986, p. 26).

#### 35.1.7 Power or Servitude

Much discussion is given to the aspect of power. As Friedson (1989) wrote, "Professional control over work, requires some control over clients. It presupposes that the professional, not the client or the employer, determines at least a good part of what work is to be done and how it is to be done" (p. 218). But Illich (in Van Houten 2008) took an opposite position, stating that professionals only want power and are making clients dependent and disabled. Schinkel and Noordegraaf (2011) argued that "power is an outcome of a struggle over control, linked to more encompassing and changing occupational contexts" (p. 70).

#### 35.1.8 Autonomous or Restricted

In part, influenced by the thinking stated in the previous section, a question has recently appeared that concerns the autonomy of the professional in an organized context. Is (s)he self-governing or is (s)he only following orders and reacting to managers (Tonkens 2003)? This issue is strongly related to a wish for quality control. Management pushes towards standardization in order to 'know' that quality is guaranteed, but by doing so, by pushing every professional onto one specific road, only the obstacles of that road are subject to improvement. The potential of learning experiences in general is pauperized and innovation, improvement, and growth necessary for a society with increasing complexity, pluralism and unpredictability is diminished (Horstman and Houtepen 2008; Van Gunsteren 1994).

Schinkel and Noordegraaf (2011) made a distinction between internal and external "professional control," stating that the core of a profession is internally organizing the quality and externally shielding professional practices from external influences.

### 35.1.9 Learning from History

The historical overview underlines the amount of connotations and denotations that apply to the concepts of professions and professionals. It also makes clear that it is a concept sensitive to history, context and society. "Professionalism can be seen as

a social construction, it acquires (new) forms and shapes in changing economies and labor organizations,", as Schinkel and Noordegraaf (2011, p. 83) stated.

The question that arises is to what connotation fits our own timeframe? We will come back to this later. The meanings that arose over the course of time, did not all retain their power and relevance. Some of these help us, however, to make the thinking behind it explicit. Thereby we prefer to preserve the positive connotations of the concept of professionalism and to do justice to it. This means choosing quality and integrity. Let us go back to some of the meanings.

What about the exclusiveness issue? In our view there is not a necessity to exclude some of the vocations. We do not believe it is fruitful to discuss which vocations belong to professions and which ones do not. Instead, we believe that anybody is free to become a professional and to develop (individually or collectively) along the insights stemming from the concepts of professionalism. We see being a professional as a way to do your job.

How relevant is education and training? In our view, it is the link with abstract knowledge that is especially basic to being a professional. The added value of a professional is the ability to make a translation from theory to application, being a bridge between science and practice. Knowledge tends, however, to become outdated in rapid tempo. Thus, it is thus not the education that is relevant, but the availability of and access to knowledge. An active orientation to let the scientific world be a part of your network is, in our view, an important condition.

How is the state of affairs as to autonomy and authority? As Sennett (2008) wrote sharply, "The master has autonomy and authority" (p. 71). Both are a consequence of solid craftsmanship. Nobody will claim to be as able as the "master" when building a Stradivarius, yet, more professions are losing their "authority," simply because the client system has become owners of the knowledge as well. This means that professionals should work harder to ensure their authority. The development of one's own expertise is part of this authority. We revisit this later. The next section presents an overview of the traits of modern professionals as it appears in the literature.

#### 35.2 Traits of the Modern Professional

The literature provides diversity as well as a fair amount of agreement between researchers on what is and what is not a professional. The second step we made was an analysis of definitions, or to be more precise, an analysis of traits.

We collected the definitions and chose the work of Gardner and Shulman (2005) as our reference point. We did so because their work shows the best link between learning and development, which fits our purposes of drawing a sketch of the learning professional. Then, we compared other attributes described in the literature with the work of Gardner and Shulman to look for confirmation or gaps and additions. Here, we present the results of the comparison and elaborate on them. Table 35.1 presents a summary.

 Table 35.1
 Different trait-theories compared

Gardner and Shulman (2005) characteristics of a professional	Also mentioned by		
A commitment to serve in the interests of clients, in particular, and the	Barber (1963): Orientation to community interest, rather than self-interest		
welfare of society, in general	Bayles (1988): In a position to provide an important service to society		
	Friedson (1989) and Larson (1978): Orientation to services and their ethics		
	Greenwood (1957) and Lubell (1978): Community sanction		
	Kubr (2002): Service and public interest		
	Millerson (1964) and Runté (1995): Altruistic service		
	Schinkel and Noordegraaf (2011) A higher calling		
	Weggeman (2007): Passionate		
The developed capacity to render judgments with integrity under conditions of both technical and	Barber (1963): A high degree of self-control through codes of ethics, internalized via work socialization		
ethical uncertainty	Greenwood (1957) and Lubell (1978): Ethical codes		
•	Kubr (2002): Ethical standards		
	Millerson (1964): Compliance with a code of		
	conduct professional standards		
	Runté (1995): Adherence to a code of conduct		
	Weggeman (2007): Has a strong professional ethics and adheres to		
A body of theory or special knowledge with its own principles of growth	Barber (1963): A high degree of generalized and systematic knowledge		
and reorganization	Bayles (1988): Significant intellectual component		
	Friedson (1989) and Larson (1978): A cognitive dimension that is about the body of knowledge Greenwood (1957) and Lubell (1978): Systematic		
	theory		
	Kubr (2002): Knowledge and skills		
	Millerson (1964): Skill based on abstract knowledge		
	Runté (1995): Skill based on abstract knowledge		
	Schinkel and Noordegraaf (2011): Knowledge and skills		
	Weggeman (2007): In the possession of specialized knowledge		
A specialized set of professional skills,	Kubr (2002): Knowledge and skills		
practices, and performances unique	Millerson (1964): Skill based on abstract knowledge		
to the profession	Runté (1995): Certification based on competency testing		
	Schinkel and Noordegraaf (2011): Own activities as		
	part of an occupation and a profession defines successful practices		
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Gardner and Shulman (2005) characteristics of a professional Also mentioned by An organized approach to learning Bayles (1988): Extensive training from experience both individually Kubr (2002): Self-discipline and self-regulation and collectively and, thus, (the profession organizes itself in membership of growing new knowledge organizations that develop the profession) from the contexts of practice Millerson (1964) and Runté (1995): Provision for training and education, usually associated with a university Schinkel and Noordegraaf (2011): A professional does not merely work; he/she has to be educated and trained, (socialized) as member of an occupational domain, supervised by his/her peers and held accountable Barber (1963): A high degree of self-control through And the development of a professional codes of ethics, internalized via work community responsible for the oversight and monitoring of quality socialization in both practice and professional Friedson (1989) and Larson (1978): The social education dimension which is about forming community on shared interests and commitment Greenwood (1957) and Lubell (1978): A culture Kubr (2002): Self-discipline and self-regulation (the profession organizes itself in membership organizations that develop the profession) Millerson (1964) and Runté (1995): Formal organization Schinkel and Noordegraaf (2011): Organized and regulated by a collective Not mentioned by Gardner Barber (1963): A system of rewards, monetary and and Shulman honorary that symbolizes work achievement Friedson (1989) and Larson 1978): The evaluative dimension centered on the professions singular characteristics of autonomy and prestige Greenwood (1957): Authority Kubr (2002): Social recognition and enforcement: The society recognizes the social role and status, and the ethical and behavioral standards of the profession, may explicitly set by middle of regulation and demarcation Lubell (1978): Authority – professionals have significant control over the nature and extent of the services that they render, because they serve clients who are generally unable to judge the quality of those services Weggeman (2007): Seeks autonomy

When we follow the characteristics proposed by Gardner and Shulman, a comparison with other authors brings the following insights:

### (a) A commitment to serve in the interests of clients in particular and the welfare of society in general

In the first place, being a professional relates to a service orientation, and thus, not to making products. There is a need for people who take care of issues such as justice or health. The exchange a professional makes with society is the commitment to act responsibly, unselfishly, and wise (within the borders of one's own profession). In return, society gives the opportunity to study and to exercise a profession. There is also an ethical perspective included as well as the tension between the interests of individual clients, in particular, and the well-being of society, in general.

This basic notion of a professional appears in the other characterizations of professionals as well, albeit, sometimes using other words. Some formulate an even stronger perspective by choosing an altruistic service orientation (Millerson 1964; Runté 1995) or even more strict like Greenwood (1957) and Lubell (1978) who focused on a form of sanctioning by the community. Some authors such as Barber (1963) were more lenient: orientation towards the interest of the community, instead of self-interest. Some other authors (Schinkel and Noordegraaf 2011; Weggeman 2007) chose an almost spiritual perspective by considering avocation or passion. It strikes us that this examination of which scientists are in agreement, is often not discussed in practice. This point raises some automatic questions about professions in large organizations where this service orientation may mean organizational commitment. How often does the interest of individual clients conflict with the direction the organization has chosen?

### (b) The developed capacity to render judgments with integrity under conditions of both technical and ethical uncertainty.

This characteristic is a direct consequence of the service orientation. It is true that all professionals have a series of standard actions, but they all have to deal with a great number of unpredictable situations. The service delivered is not purely dependent on the profession. Each situation is different and again, not only technical, but also pragmatic and ethical considerations play a role. In dealing with these contexts exactly, lays the integrity of the professional to make ethical decisions. Here, we also see the differences between a professional and a craftsman. Both have a technical component that is characterized by a continuous wish to improve (Sennett 2008). The dilemmas that a professional encounters are, however, different from that of the craftsman. Where a craftsman, for instance, chooses between beauty and functionality, the professional may be considering the balance between technical, ethical and pragmatical issues.

The most striking difference between Gardner and Shulman and the other authors is their emphasis on learning processes in contrast to predetermined norms in a code of conduct. Only Barber (1963) formed an exception by speaking of a high amount of self-control that is facilitated by a code of ethics which is

internalized by the socialization process of the work itself. Gardner and Shulman wrote that the work goes beyond the repertoire that was originally learned. The more the dynamics and complexity of the world increases, the more there is pressure to make ethical decisions, and thus, additional requirements for the learning processes that accompany these.

### (c) A body of theory or special knowledge with its own principles of growth and reorganization.

Although it was not the first element in Gardner's and Shulmans' overview, one trait, which has often disappeared in the many disputes of who is and who is not a professional, came forward as a stable core component: the possession of formal knowledge. In our view, this characteristic of the professional should also include the ability to translate this to practice. Although Schön (1983) had a broader perspective on 'theory,' he also saw the connection between theory and practice as the main quality of a professional. Within all of the discussions and differences of opinion, this element underpins most of the views on professionals and professionalism. It was part of the structural functionalism of Parsons (1954), the power-oriented approach of Illich (1971) and the attribution approach of Friedson (van Houten 2008). Friedson (1989) deepened this insight of the role of knowledge. He made a clear distinction between the knowledge that influences practice, and the knowledge that scientists present. We tend to forget that these, as he expressed it, are different types of knowledge. "By definition, formal knowledge is not part of everyday knowledge. Knowledge must have agents or carriers" (Friedson 1989, p. 9). In history, these carriers have had different names, being: 'intelligentsia' (Poland and Russia, 1860s), 'intellectual' (Western European and North American), 'experts' and also 'professionals.' It is this characteristic, being the translator between theory and practice, which is probably the core characteristic of a professional.

Here too, our practical experience gives us an indefinable feeling. As stable as this characteristic appears in the theories, so it is absent in practice. Formal knowledge is often maligned and professionals demand that knowledge should be applicable immediately. One can hear professional practitioners say comments such as: "I do not like books. This article is too abstract. This approach is too scientific. It should be usable tomorrow." Some professionals make these comments without any hesitation.

Taking this principle seriously also means that the professional is aware of the fact that (s)he is the translator of theory and research and that formal knowledge should not be avoided but instead, be actively sought when one wants to be an effective professional. We propose to let the ability and willingness to translate theory into practice be the core of this trait. In comparison with the other authors, Gardner and Shulman proposed the addition; "with its own principles of growth and reorganization" (p. 14). As such, this characteristic is more contemporary. We propose to reformulate this characteristic into, "willingness and ability to translate a body of theory or special knowledge with its own principles of growth and reorganization into practice."

### (d) A specialized set of professional skills, practices, and performances unique to the profession.

According to Gardner and Shulman, technical skills such as skills related to analyzing, argumenting, treatment, rites, diagnosis, action and interaction are very distinctive for professionals. They made this a separate characteristic, whereas other authors (Kubr 2002; Millerson 1964) tended to combine this with the previous characteristic (body of theory or special knowledge). Schinkel and Noordegraaf (2011) focused on one's own activities that define a successful practice. We agree with these last mentioned authors and with Gardner and Shulman that these skills, practices and performances merit a separate place, because these stem from learning in practice and not from theory.

## (e) An organized approach to learning from experience both individually and collectively and, thus, of growing new knowledge from the contexts of practice.

This fifth point was originally formulated as the continuous necessity to learn from experience in order to become smarter, wiser and more skilled. However, Gardner and Shulman discovered that no professional can do this alone. They need each other to grow into the profession and to add new insights. Most of the other authors confined this point to formal training (Bayles 1988; Millerson 1964; Runté 1995). Kubr (2002) added self-discipline and self-regulation and Schinkel and Noordegraaf (2011) also took a broader interpretation: a professional does not merely work; he/she has to be educated and trained, (socialized) as member of an occupational domain, supervised by his/her peers and held accountable. The unique contribution of Gardner and Shulman, which also appeared in their previous points, was their awareness that both the individual professional and the profession itself should develop and continue to develop. The core of this point is that professionals and professions should develop and keep on developing continuously.

### (f) The development of a professional community responsible for the oversight and monitoring of quality in both practice and professional education.

The sixth and final point described by Gardner and Shulman also finds broad support in the literature. Millerson (1964) and Runté (1995) focused on the importance of the formal organization. Friedson (1989) and Larson (1978) mentioned the social dimension about forming a community on shared interests and commitment. Greenwood (1957) and Lubell (1978) mention the importance of a culture. Barber (1963) stressed the importance of a high degree of self-control through a code of ethics, internalized via work socialization. Kubr (2002) formulated this in terms of self-discipline and self-regulation (the profession organizes itself in membership organizations that develop the profession). Schinkel and Noordegraaf (2011) wrote that professionals should be organized and regulated by a collective. When we carefully look at the previous five points described by Gardner and Shulman, it is clear that all of the other points refer to collectivity as well. The most clear and explicit example is in characteristic five (i.e., the necessity for the profession to keep developing). In the other points, collectivity emerges in Gardner's and Shulman's description.

Although he professional community is a recognizable and central focal point where all developments, ideas and mores come together, an important question remains whether this is a characteristic of a professional or an automatic consequence of professionalization. In our view, the core of these communities is in the processes of learning and development where professionals need each other for their own reflection, as well as for the development of the profession.

### (g) The role of autonomy and authority

After comparing the six traits as proposed by Gardner and Shulman, there remains a striking set of characteristics that is absent in their article. These appeared not only in the other articles that we studied but also in our historical overview as well as in the discourse we see in practice. Autonomy and authority are the keywords that we will use for these characteristics. We propose to add these to the six points of Gardner and Shulman. The characteristic related to autonomy we formulate as follows. The professional has an orientation towards active shaping of one's own professionalism. Professionals choose to be professionals and thereby, to be self-directed and autonomous (as a result not as a demand). The authority perspective, we would like to formulate as: professionals have an orientation towards active shaping of the profession and of educating fellow-professionals and newcomers.

An important question, however, is whether autonomy and authority are really characteristics of professionals or more consequences of *professionalism*. Autonomy can be seen as closely related to commitment and it arises when professionals have a high quality of professional work execution (Ryan and Deci 2012). Authority arises by executing the profession with a high level of knowledge and quality. Autonomy and authority, so we conclude are more benefits of being a professional than characteristics.

In institutionalized settings where professionals work in larger organizations, the issues of authority and autonomy arise in different ways. In the interplay between managers and professionals, underlying norms and values related to autonomy and authority require attention. Perhaps the interplay is about ownership, but in practice, arguments of quality tend to dominate. Professionals *feel confined* because managers and policymakers want to ensure quality that in the professionals' thinking can only be reached through determining the path to quality (e.g., through standard procedures).

Political philosopher Van Gunsteren (1994) cast a revealing light on this dilemma by highlighting that by following the same path (control), the only progression you make is within that pathway. If practice is organized by one standard, the potential of learning experiences will be greatly impoverished (Horstman and Houtepen 2008). Thus, in a world as ours, characterized by complexity, unpredictability, pluralism, we need to nourish different paths, competencies, and learning experiences. Will this freedom then bring the necessary quality? No, we do not believe so. However, it may lead to another type of quality. In the end, we believe that it is better to stop thinking that freedom or control will lead to quality improvement. The discourse about quality (and ownership) is part of professional functioning, in which organizational, societal, professional and individual interests have to be weighed.

### 35.3 Where Does This Bring Us?

In search of a modern set of characteristics of a professional, we found in the literature, and especially in the work of Gardner and Shulman, a set of eight meanings and traits. In the current section, we formulate our resulting set of principles. First, it is important to notice that the nature of the characteristics/principles is rather diverse. Some refer more to conditions of consequences than characteristics. Therefore, we distinguish requirements, qualities and benefits. Collectivity is both a separate characteristic, and appears in the other characteristics as well. Some descriptions of Gardner and Shulman have to be reformulated, others remain intact. Two additions also seemed necessary. Table 35.2 presents the resulting descriptions of self-determined learning professionals as well as key points and the original formulations of Gardner and Shulman.

What results is a core of four qualities that each have an individual and a collective side: (a) having and maintaining a body of knowledge, (b) having theories of action with which the professional deals reflectively, (c) disposing an own field of expertise with which one can enrich professional colleagues, and (d) belonging to one or more professional communities. These qualities become only relevant when there is: (e) commitment to services to clients/society, and (f) an orientation to act with integrity in settings where technical, pragmatical and ethical approaches conflict. Finally, a good execution of the profession will lead to autonomy and authority. These strengthen the professional in their possibilities, but cannot be seen as conditions or qualities. Figure 35.1 illustrates this.

What has happened presently within a complex world, using the concept of professional in a mostly classical and diffused way, is only leading to a battered

	Characteristics of the professional according to Gardner and Shulman (2005)	Key points	Characteristics of "self- determined learning professionals"
Requirements	A commitment to serve in the interests of clients in particular and the welfare of society in general	Commitment	Have a commitment to serve in the interest of clients and society, and by extension have a commitment to take their own learning and development seriously
	The developed capacity to render judgments with integrity under conditions of both technical and ethical uncertainty	Integrity	Have the will and ability to handle 'not-knowing' and the unexpected with integrity, and by implication are oriented towards reflecting on these experiences

**Table 35.2** Characteristics of the professional reorganized and redefined

(continued)

Table 35.2 (continued)

	Characteristics of the professional according to Gardner and Shulman (2005)	Key points	Characteristics of "self- determined learning professionals"
Qualities	A body of theory or special knowledge with its own principles of growth and reorganization	Body of knowledge	Have abstract knowledge (body of knowledge), are willing and able to translate that into practice and are in connection with new developments in science
	A specialized set of professional skills, practices, and performances unique to the profession	Theory of action	Have a specialized set of professional skills and 'theories of action' and have the willingness and ability to be reflective practitioners
	An organized approach to learning from experience both individually and collectively and, thus, of growing new knowledge from the contexts of practice	Field of expertise	Have their own 'field of expertise' and have the desire to play a role in learning from experience both individually and collectively and, thus, of developing practice and fellow practitioners
	And the development of a professional community responsible for the oversight and monitoring of quality in both practice and professional education	Professional community	Belong to one or more professional communities, has an orientation to work collectively and trans disciplinary in order to cope with complexity
Benefits	Cucanon	Autonomy	Has an orientation towards active shaping of his or her own professionalism; he or she chooses to be a professional and thereby chooses to be self-directed and autonomous (as a result, not as a demand)
		Authority	Has an orientation towards active shaping of the profession and of educating fellow-professionals and newcomers

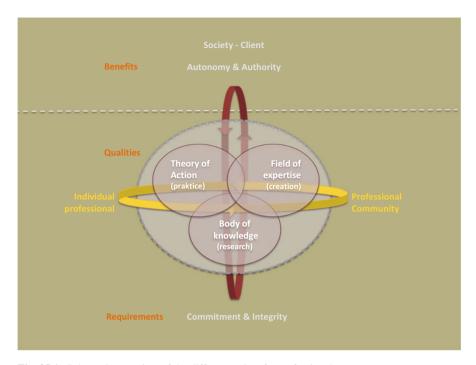


Fig. 35.1 Schematic overview of the different traits of a professional

professional, who has forgotten how to defend his profession. Organizations (or is it society) react to this by adding control. Professionals react by defending their professional space. In this battle, the connection between theory and practice becomes more diffused.

Instead of control or professional space, we have to place attention on the connection between theory and practice, and to the fact that being a professional is a choice; a choice, which brings forth responsibilities (e.g. to stay connected to theory) and powers (e.g. to be autonomous).

Choosing to be a professional entails:

- Doing the best for clients and society,
- Acting in integer ways in uncertain and complex situations,
- Actively connecting with the newest insights in theories,
- Daring to look critically and reflectively towards one's own practice, and
- Contributing to the development of the profession and fellow professionals.

This choice requires an interplay with fellow professionals and brings, if executed well, autonomy and authority. As the word professional comes from the Latin profiteri, which means openly declared (Wanrooy 2001), the real question is: who wants to openly declare they are a professional? The answer to this question also includes the commitment to actively organize one's professionalism, to learn and

develop, both individually and collectively, in formal education, training and at work. Setting this question as the foundation, the traits we derived from history and theory become more contained and meaningful. As a consequence, those who choose to be a professional fit Maister's (2006) remark, "believing passionately in what you do, never compromising your standards and values, and caring about your clients, your people, and your own career". Those professionals will make high demands of themselves, improve their own performance and strive to provide the best possible service to their clients (Maister 2006).

### 35.4 From Professional to Learning Professional

Thus, we start defining a professional by saying that it is a choice and involves responsibilities, capacities and gains. The question no longer is: who is a professional, but who chooses to be a professional. And by consequence if you choose to be a professional – how do you shape your professional development in order to remain a professional. Bodies of knowledge as well as the standards of work quality and contexts change so rapidly, that nobody can earn the 'title' of professional by studying hard and keep it forever. The title continuously has to be re-earned by a way of practicing and learning. For these reasons it is of the utmost importance to integrate learning and development into the traits of a professional. It is not (only) a matter of gaining a body of knowledge, but of maintaining a body of knowledge; not (only) of having a theory of practice, but of keeping it accurate. Thus, the next question is what types of learning are necessary in being a learning professional? Let us start by going back to the traits and make a first derivate (see Table 35.3).

### 35.4.1 Three Ways to Learn

There are three basic ways of professional learning that are close to the key task of professional work (as described above): learning through practicing, inquiring and creating (see Table 35.3). Ruijters and Simons (2006) analyzed and described these three basic ways of learning extensively in their metaphor "Islands of learning." First, we summarize the meanings of these three ways of learning. The next sections discuss them in more detail. Subsequently, we will introduce the other parts of our metaphor: bridges and polders (see Fig. 35.2).

Practicing is all learning that is taking place (most of the time) automatically in the context of working, problem solving and living. It is learning as a side effect of other activities that is mostly not pre-organized, pre-planned or pre-structured. Its outcomes are experiential knowledge and skills. Inquiring is all learning that leads to new (mostly explicit) knowledge and skills. It includes doing or being involved in research, as well as activities such as reading books and journals, going to conferences, executing practical or applied research, having discussions, comparing ways

Table 35.3 Characterizations of learning processes of "self-determined learning professionals"

	Key points	Characteristics of "self-determined learning professionals"	Underlying learning process
Requirements	Commitment	Have a commitment to serve in the interest of clients and society, and by extension have a commitment to take their own learning and development seriously	Meta-learning and reflection on research, practice and creation
	Integrity	Have the will and ability to handle 'not-knowing' and the unexpected with integrity, and by implication are oriented towards reflecting on these experiences	
Qualities	Body of knowledge	Have abstract knowledge (body of knowledge), are willing and able to translate that into practice and are in connection with new developments in science	Learning through research
	Theory of action	Have a specialized set of professional skills and 'theories of action' and have the willingness and ability to be reflective practitioners	Learning through practice
	Field of expertise	Have their own 'field of expertise' and have the desire to play a role in learning from experience both individually and collectively and, thus, of developing practice and fellow practitioners	Learning through creation
	Professional frame	Belong to one or more professional communities; has an orientation to work collectively and trans disciplinary in order to cope with complexity	Collective learning, co-creation
Benefits	Autonomy	Have an orientation towards active shaping of their own professionalism; they choose to be a professional, and thereby choose to be self-directed and autonomous (as a result, not as a demand)	Meta-learning and reflection on research, practice and creation
	Authority	Have an orientation towards active shaping the profession and educating fellow-professionals and newcomers	

of working, and visiting another organization, etc. Creating refers to learning that is taking place in the context of the development of new tools, products, publications or services. These various ways of creating lead to design knowledge. It is when one tries to develop or design something that one discovers what one knows and especially, what one does not know.

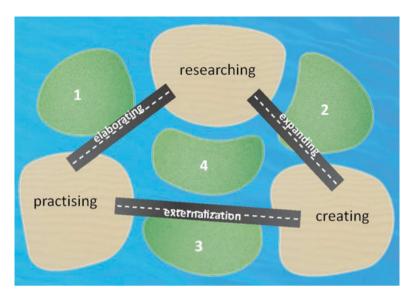


Fig. 35.2 Islands of learning (Ruijters and Simons 2006)

### 35.4.2 Practicing: Learning Experientially

The island of practice implies learning experientially and implicitly. Who we are as professionals is a hodgepodge of formal education, what we have learned in every-day life, semi-formal experiences as coaching and mentoring, and beliefs and social influences. Formal education gives us our legitimacy, but what we learn, without explicit knowledge, is at least as important in becoming and staying a professional (Leonard and Swap 2005).

The big question is how to build on experiences. In many instances, we think it is better to find ways to help professionals reorganize their work in such a way that the chances of implicit learning grow and increase (Leonard and Swap 2005). This brings us to the following questions: Is it possible to (re)organize workplaces without making learning more explicit and to increase the chances of implicit learning? How can we do that? Based on the studies of Onstenk (1997) and Kwakman (1999), we think this is possible by focusing on six features of work processes and work environments, being: 1. variation, 2. responsibilities, 3. feedback, 4. reflection, 5. innovation/experimentation and 6. vision building.

These six can be organized by managers (e.g., giving time for reflection, organizing feedback, giving autonomy, planning innovation and experimentation, and so on), but they can also be organized by the professionals themselves (e.g., looking for feedback, reserving time for reflection, looking for variation, being open to innovation, etc.).

### 35.4.3 Inquiring: Learning Through Inquiry

The second important aspect of 'remaining a professional,' and acquiring new and necessary knowledge and skills is staying connected to research (our second island). This can take many forms. A professional may read scientific articles, have connections with scientists, may be involved in scientific research or (s)he may do practical research. The degree to which this research resembles scientific research itself varies. It can be an unsystematic attempt to try out new ways of working as well as semi-scientific comparisons between different ways of working. In this perspective, reading articles and books, attending conferences, and discussions as well as formal education are all examples of research (i.e., gaining new knowledge, skills, and insights). One of the most important ways of learning through research for a professional is through explicit self-directed learning. This may involve:

- Formulating learning goals,
- Planning learning activities and strategies,
- Testing learning results,
- Monitoring learning,
- Judging and rewarding learning, and
- Placing learning processes and learning outcomes at the center of attention.

Studies of learning on the job by Doornbos and Krak (2001) and (Eraut 1994) showed that, as compared to the occurrence of implicit learning, only few professionals tend to organize explicit learning themselves. This, probably, has to do with the emotional states related to the occurrence of explicit learning. One needs some confidence before engaging in learning in the first place, and one needs some curiosity in order to be motivated to get involved with explicit learning (even if it concerns on the job learning). When one is learning explicitly, confidence in one's own, mostly implicit theories and competences will increase. Moreover, learning explicitly can even create increased curiosity: the more one knows, the more one wants to know.

### 35.4.4 Creating: Learning Through Design

The third island, creation, refers to learning from producing or designing. It has its origins in the wish and necessity to transfer one's own insights and experiences to colleagues. However, in developing new products, tools, instruments, manuals, policy-plans, guidelines and in teaching others, we also (or mainly) learn ourselves. The need to develop an island of expertise of one's own (which is part of being a professional), leads to the need to create, which in of itself, results in new insight so that our own field of expertise becomes stronger. Here, we see a need for professionals to connect their learning to concrete and public milestones or deliverables. These milestones can be in the profession (e.g., publications, lectures, workshops, teaching

activities, etc.) or in the workplace, both at the team (e.g., plans for group actions; contributions to team learning) and the organizational level (e.g., contributions to company policies or to organizational learning). Common in these milestones is that they are concrete and related to (learning-) activities of other people. Moreover, these milestones can be made visible and connected to a date and place, for instance, "I will make a checklist for my organization before Christmas and publish this on the company web" or, "I will reformulate our vision and collective ambitions." Concrete milestones make the outcomes of creation learning visible and easy to share and plan. Milestones can bring the necessary challenge that helps the learner to maintain the motivation to continue and to learn, and to put personal learning outcomes in relation to the learning and working of other people. Professional colleagues and team members can profit from one's learning and the learner has something to look forward to. The milestone can provide an extra form of reward when reached. It is exciting to see that people use what you have learned and developed. It is rewarding to see that one's article is accepted for publication in a professional journal, etc. But most of all, it is the learner, who in searching for the right words or explicating the ideas necessary for teaching others or making concrete applications perhaps profits the most in learning from these activities.

Van Veldhuizen (2010) studied learning of vocational teachers in a project, "learning at work, working to learn". Teachers could choose to attach their learning to specific work goals and projects. They received time to accomplish this and had freedom in choosing their own milestones and work outcomes. The learning trajectories were very successful and led to important learning outcomes. One question was whether these teachers would use the freedom granted or not. These were the results:

- Choice to co-operate or to work alone (11 co-operated versus 4 alone),
- Choice of partner(s) (7 chose their partner versus 5 had assigned partners),
- Choice of assignments (10 chose themselves versus 4 did not),
- Choice of assignments inside or outside own department (11 inside versus 2 outside),
- Making their learning goals explicit for their partner(s) (5 yes versus 9 did not), and
- Engaging in explicit activities that contribute to their learning goals (13 yes versus 2 did not).

Thus, the teachers differed in the extent to which they decided to make use of the freedom offered. The next sections introduce the remaining parts of our metaphor "Islands of learning."

### 35.4.5 Connection and Reflection

Practicing, inquiring and creating are the three basic components of the learning-professional model. However, these basic forms of learning are not automatically interconnected. Just like islands in the sea, they tend to be separate. What one learns

in practice is different from what one learns through inquiring or creating. Think for a moment about the difficulties of implementing new ways of working. How often did you hear someone state that it was an interesting lecture, but it did not change his or her practice? Specific learning activities and processes are needed to make connections. One can recognize the ways of learning as being 'islands.' Bridges were added to conceptualize the ways of learning that connect islands.

Connecting islands is essential for more than one reason: it brings more focus to someone's professional development (e.g., searching for new knowledge is the result of the questions raised by practice, instead of encountering an arbitrary input accidentally), it makes experiences explicit so as more possible to share, and by setting some distance to practice, it is possible to see patterns and to make double loops in learning, to name a few.

Bridges form the second components of the model connecting two types of knowledge originating at two islands. The outcomes of one way of learning (i.e., practicing, inquiring or creating) are connected to the other way of learning. The bridge between practicing and inquiring we call elaborating: making implicit knowledge originating from practicing explicit in order to be able to investigate it further and apply explicit knowledge in practice.

The bridge between inquiring and creating we call expanding. This bridge connects new knowledge with possible products, tools or services: what can be developed further on the basis of this knowledge, what is interesting enough, and what are important target groups and markets? It also refers, the other way around, to finding gaps in knowledge that one needs to fill in order to be able to design, develop or publish.

The third bridge is called externalizing and connects new products, services, tools and publications to practice. How can something new be implemented in practice? What new products or tools are needed in practice? Bridges can be crossed from two directions. In our model, these directions have different meanings. We will explain these directions in relation to the first bridge, the bridge of elaboration.

### 35.5 Elaboration: Becoming Aware of One's Implicit Learning Outcomes and Processes

There are good reasons for professionals to develop more awareness of implicit learning processes and outcomes. First, when people realize what they have learned implicitly, they develop a sense of pride, and a shift in their mental model: from learning-is-only-for-the-IQ-smart to learning-can-take-place-every-moment-in-mywork (Claxton 1999). "Gee I did not know that this job gives me so many opportunities to learn" or, "I thought I wasn't such an egghead, but I learned quite a lot in such a short time, and not only being lectured or reading things." It is important, according to our experience, to start by focusing on what one has learned, not about what is lacking. A second reason to create awareness of learning processes and outcomes lies in the fact that people can only share the outcomes of learning when they are

aware of them. And thirdly, how can people improve their ways of learning when they do not know of what and how they learned?

Awareness of learning processes (thus explicit learning processes) can arise before, during or after the activities and processes. Often, however, this awareness does not arise at all (see for example Doornbos and Krak 2001; Eraut. 1998). When learning outcomes are implicit, people do not realize what they (have) learn(ed) during activities such as working, playing or problem solving. Awareness of learning outcomes can also arise before, during or after the activities or processes mentioned. And again, sometimes this awareness of learning outcomes does not arise at all. Learning remains fully implicit in that case (Borghans et al. 2007).

When Doornbos and Krak (2001) interviewed police officers about their work-related learning, they reported hardly any learning outcomes or learning processes. The word 'learning' made people look for courses they attended, books they read, coaching they received and so on. Only when the word 'learning' was not used and instead questions were asked about changes in behavior or work, people started to become aware that they had learned much in and from their work. By focusing on concrete changes in work processes or outcomes, they could become aware of their learning processes. And only after they became aware of what they had learned, did they start to talk about how they had learned.

It is neither possible nor desirable to make all implicit learning outcomes and processes explicit. Sometimes it is even better not to make implicit learning explicit. As Nonaka and his colleagues (Von Krogh et al. 2000) made clear, there can be an implicit kind of exchange. And it is within informal activities and settings, and without explicitness, that people develop a feeling of shared competences (Nonaka et al. 1998). But when one wants to become aware of one's implicit learning outcomes and processes, how could one do that?

There are different methods to use in order to make learning outcomes explicit. The first technique for making learning outcomes explicit through individual reflection came from Eraut (1998) and his colleagues. Instead of asking for learning outcomes directly, they asked (semi-)professionals (in their study: policemen and nurses) what had changed in their work. "In what ways is your current work different from one, two or five years ago?", "What does this tell you about what you know now and are now able to do that you were not able to at that time?". Another technique used is asking people to describe an ideal professional. For example: "How does an ideal human resource manager work?" People prove to have quite elaborated ideal models. The next question could be, "In what respect are you yourself already an ideal worker/professional?" This leads, almost automatically, to a discussion of differences between ideal and practice and from there to learning outcomes. For example, we met a human resource manager describing the ideal HR-manager as someone who is constantly networking with all line managers in the organization in an informal way. When talking about his ideals, he himself discovered that he was not practicing this at all. Thus, asking people to reflect on the difference between their picture of an ideal practitioner and their own explicit and implicit competences may help them become aware of learning outcomes reached and needs for more explicit learning afterwards. A third technique often used is the critical incidents

method. People try to think of practical situations that were critical. From there they start to think of the underlying competences.

This technique resembles the 'pretty good practices' approach described by Marsick (2001), in which people talk about examples of situations where they performed pretty well. Marsick noted that it is important not to ask for 'best practices' because we then put too much pressure on people to excel. In our experience, we found that it is even important to avoid talking about failures and focus on positive incidents. By positive critical incidents or pretty good practices, there is a greater willingness and there are less defense mechanisms to do some 'research' into details of the learning outcomes and processes.

Also, related is the 'Story telling'-technique, where people tell anecdotes and stories from their practices. The difference here is the 'story telling mindset' activates a certain amount of detail in describing circumstances and events from a certain distance (talking about yourself in the third person). Another technique, described by Marsick (2001) is walking in the shoes of the client. People are invited to take the perspective of one of their clients and examine themselves through this perspective.

### 35.5.1 Elaboration 2: Transfer of Explicit Learning – The Way Back

"Transfer of learning occurs whenever prior-learned knowledge and skills affect the way in which new knowledge and skills are learned and performed" (Cormier and Hagman 1987, p. 1). In elaboration 2, research and practice become connected. This is mainly related to the application of new knowledge and skills to practical working situations. Simons (1999) described six transfer paradoxes that learners encounter when they need to apply new knowledge and skills in new working or learning situations. Four of these apply to the transfer of new explicit knowledge and skills to practical situations:

- The paradox of using relevant prior knowledge. Although it seems logical to make use of all the prior knowledge you have, there are also several good reasons not to do so. People may not be aware of the importance of the active use of prior knowledge. Using prior knowledge may require a great deal of work, may create confusion, may distract you from the main points, and may make your learning too idiosyncratic. Thus, from the perspective of the learner, the problem is when to use prior knowledge actively and when to protect oneself from its influences.
- The paradox of recognizing relevant situations and conditions. In these cases, people simply do not see that two or more situations or conditions are similar. When is a situation similar to another one? Indeed, there are so many dimensions on which situations differ (e.g., time, place, content, culture, mood, etc.). Bereiter (1995) described the main problem of transfer as a transfer between situations. How can one prepare for situations one cannot know? The only two things a learner can do (see also Bereiter 1995) are to strive for real and deep understanding

- (optimizing the accessibility of the knowledge) and to collect knowledge about the situational conditions.
- The paradox of near and far transfer. In near transfer, there is a close connection between the learning situation (or the prior knowledge) and the application (or the new learning situation). In far transfer, the distance between prior knowledge or learning and application (or the second learning situation) is much greater (see Mayer and Greeno 1972). This is not a dichotomy; rather, it is a dimension of distance. This distance can sometimes be measured or manipulated (see Bassok and Holyoak 1989). However, the distance is a subjective measure that varies among individuals (Simons and Verschaffel 1992). An important hypothesis is that one has to do different things for near and far transfer; a strategy for near transfer may be inappropriate or ineffective for far transfer and vice versa. For near transfer, one needs the low road to transfer (Salomon and Perkins 1989): to automatize and practice in a small range of situations (contextualization) (see Simons 1990). For far transfer, however, the high road (Salomon and Perkins 1989) is better: decontextualization and practice in a variety of different situations are important strategies. For learners, the basic paradox is whether to go for near transfer and to confine the range of situations, focusing on practice and automatization, or to go for far transfer, searching for decontextualization and variety.
- The paradoxical- What should one transfer? Collins et al. (1989) distinguished four types of transferable elements: (a) domain-specific knowledge (concepts, rules, algorithms); (b) heuristic problem-solving strategies; (c) strategies for self-regulation; and (d) learning strategies. For learners, the paradox amounts to choosing among the various elements that could be transferred. What should and could the learner take with him or her to other situations? Is it possible to combine several elements?

These four transfer dilemmas demonstrate how complex the road from research to practice can be. Trainers tend to end a training session with questions about future applications. However, this is often not enough. Application in practice requires time and space to reflect and to find suitable ways of application. Transfer from new knowledge and skills to practice are by no means an easy task. For professionals, it is not sufficient to be connected to research; they need accomplish the transfer to their practice as well.

### 35.5.2 Collective Learning and Co-creation

Thus far, we described three basic forms of learning (practicing, inquiring end creating): the three islands. These islands are not automatically connected. For professional growth, connections between the islands are necessary. We introduced the metaphor of bridges between the islands, each being bi-directional: elaboration, expanding and externalizing. The previous sections described the two elaboration

bridges in more detail. Bridges are effective ways to bridge islands, but they are predominantly individual pathways.

As stated above, learning of professionals becomes more of a collective learning. The accelerating developments in our society make it necessary, but not enough, to have excellent professionals in a work force. Increasingly, these professionals need to be able to work together in solving problems and innovating more accurately and quickly. Thus, more professionals are working in teams, both interdisciplinary and monodisciplinary. By consequence of this, professionals should also learn collectively, they have to create spaces where co-creating takes place, and where through this process of working and reflecting together, develop mastery (Leonard and Swap 2005). This has not been discussed much so far. In our view, in the future, professional learning needs to be extended to collective learning. Two forms of collective learning are to be distinguished: organization-related collective learning and profession-related collective leaning.

Organization-related collective learning refers to processes and intended outcomes of learning of a working team or an organization. Teams of professionals or teams including professionals decide to collaborate in learning, focusing on common learning activities and processes or on common outcomes. 'Communities of practice' (Wenger 1998), share a common interest in the organization and learn within and from their work and then share this learning.

Profession-related collective learning consists of professionals, working in different organizations, but sharing the same profession and deciding to learn together from their different practices. They do not have a common interest in one organization. They may be even competing for the same clients. Their common interest is in learning. Therefore, we call these 'communities of learners' and not 'communities of practice.' Collective outcomes can partly be the same as those of communities of practice, but additionally, they can relate to contributions to the professional field in terms of publications, lectures, tools, etc. All of these features of work environments can be organized individually as well as in collaboration with others: with colleagues, coaches, managers and clients. Each of these categories of actors may bring different perspectives and contributions to implicit learning.

For the collective connections between islands, we use the term polder. This is a new land between the islands (typically Dutch?). The processes of learning at two islands are integrated in a collective process. Professionals work together to integrate the learning processes at two or three islands. The polders we distinguish (e.g., action research, design based research, co-creation and pioneering) are all very well applicable to professional learning.

The first polder in between practice and research is about investigating one's own practice. Practitioners study their own practice, primarily together. In the second polder (between research and creation), creating and inquiring are combined and become inseparable. New products or services are designed in an alternating process of investigating and designing. Instead of designing something in a linear way, one attempts various possibilities and then compares and studies these. It is this polder, which is necessary, not for improvement, but for innovation.

The third polder is in between practice and creation: practicing and creating are combined socially in improving the practice and infusing new ways of working. Practitioners and designers work closely together or practitioners develop their own tools or publications on the basis of existing material. The fourth polder component of our model is in the middle and makes use of all three islands. It is related to transformation of a practice by creating a space for piloting and experimenting by starting from scratch. Beforehand, one cannot determine what direction should be taken and what should change or not. In pioneering, practitioners do pilots and prototyping in running their practice, combining practice, research and creation.

Here we will elaborate action research, the polder between practice and research as an example. Ruijters (2006) described the other four polders in detail.

### 35.5.3 Using Action Research to Co-create

Professionals executing practice-oriented research, work together in investigating their own practice(s). Through action research, professionals strive to improve their professional practice through continual learning and progressive problem solving. Moreover, they try to deepen their understanding of practice and to develop a well-specified theory of action. Finally, they try to realize improvements in the community in which their practice is embedded through participatory research. Through the systematic collection of data, professionals are searching for answers to questions that arose during practice and will help to improve that practice. Although scientific knowledge is not the first aim of action research, it is not excluded. The first aim of action research is finding answers to practical questions, solving practical problems and improving practices.

Riel and Lepori (2011) stated that in action research, professionals gradually come to live their theories. This happens in a series of reflective stages. Studying, acting, collecting evidence and reflecting help professionals to develop their personal and collective theories. Moreover, at the scholarly level, professionals also contribute to the larger disciplinary community.

Closely related to this is the recent focus on evidence-based practice. Groups of professionals try to apply firm scientific evidence that fulfills certain strict criteria of reliability and validity into their practice. These forms of application will not happen easily, however, as these often ask for fundamental changes in practice. Therefore, collaborative action research is needed for professionals to help each other in finding ways to accomplish this. De Groot (2012) showed, for instance, that communities of veterinary doctors found it very difficult to reflect deeply and critically on new evidence coming from veterinary science. Recently, action research occurs sometimes in close cooperation with more theory-oriented research groups at universities. Another perspective is that evidence is not only coming from research, but also from practice: practice-based evidence. Professionals collect evidence through action research. They investigate the effectiveness of their practices (Fig. 35.3).

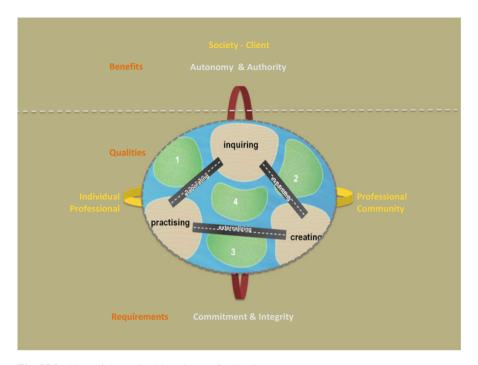


Fig. 35.3 The self-determined learning professional

#### 35.6 Conclusion and Discussion

We first defined a professional by stating that it is a choice and involves responsibilities, capacities and benefits. The question no longer is: who is a professional, but who chooses to be a professional. And by implication, if you choose to be a professional – how do you shape your professional development in order to remain a professional. Professionalism thus starts with a commitment to clients, the profession, the organization and society. Because a professional is also a knowledge worker and knowledge becomes obsolete quickly, there is also a need for integrity: balancing between technics, pragmatics and ethics, as well as learning from experiences. The main qualities of a professional are having a body of knowledge (i.e., being anchored to theory), and having a theory of action, as well as being able to make translations from theory to practice and vice versa. This also means being able to extend theories with new hypotheses. Finally, the professional develops an own field of expertise from which contributions to the profession and fellow professionals can be made. Three ways of learning form the basis: (a) inquiring: learning through inquiry, (b) practicing: implicit experiential learning, and (c) creating: learning through design. We call these the three islands of learning. Because these islands do not connect automatically, there is a need for more than the isolated ways of learning: connection and reflection. That is what occurs at the bridges:

(a) elaborating: translating new knowledge into practice and translating practice into personal theory, (b) expanding: finding new tools and products on the basis of new knowledge and finding gaps in knowledge needed for design, and (c) externalizing: translating design knowledge into practice and finding needs for new products and tools. With these ways of learning, a professional can learn individually. However, collectivity is lacking. This collectivity is crucial for the profession to grow and survive. Four ways of collective learning we distinguished as polders are: (a) collaboratively investigating one's practice, (b) collaboratively working on long-term innovation, (c) collaboratively redesigning semi-finished products, and (d) pioneering: combining practice, research and design in pilots and prototypes.

Being a professional thus is a choice to use one's knowledge, theories of action and field of expertise in a committed and integer way, in service of clients and society. This requires the described forms of individual and collective learning and development as well as making learning experiences explicit, reflecting on learning and regulating one's own learning in a self-directed way. Autonomy and authority will occur as a consequence of this professional attitude and way of working.

Our new model of professional learning, defining professionalism in a dynamic way and relating it to various ways to learn, is in essence a normative model of professionalism. It specifies what and how professionals should be involved in individual and collective learning and how they can organize this. How can the model be used? Thus far, we used the learning landscape model in three ways. The first is mapping learning of professionals and their organizations: which islands of learning are visible and how large are these islands, what bridges appear and how strong are these? Do we see polders and how extensive are these? This can help learners and their organizations see where their strengths and weaknesses are in terms of learning. What islands, bridges and polders are dominant; which ones are absent. The second way of using the model is by reconstructing previously executed learning trajectories. How can we place interventions and ways of learning in the learning landscape? With "post-its," we placed all of these on a drawing of the learning landscape. This helped learners to find one-sidedness and gaps in their approaches. The third way application was in designing learning trajectories. Systematically, we co-created learning trajectories that encompassed the whole learning landscape. Here, the model is a kind of heuristic helping people to design learning in more systematic ways.

For individual professionals, this model implies:

- They should carefully monitor their own development,
- They should regularly question their own commitment,
- They should reflect on the ways they deal with the tensions between technics, pragmatics and ethics, in relation with (practical) knowledge,
- They should think about the way they deal with autonomy,
- They should be aware of their authority and reflect on it regularly,
- They should actively work on their body of knowledge, their theories of practice and their fields of expertise, and
- They should seek connections with fellow professionals and science.

For organizations, this means that they understand that professionals are the owners of their own development and that steering the development of professionals or the profession can only take place through invitation, seduction and not through control and obligation. Although parts of the island's model are based on empirical research, the generalizations still await further empirical testing. We hope that researchers will take the challenge to test these generalizations and that we will be able to do that research ourselves in the years to come.

#### References

- Barber, B. (1963). Some problems in the sociology of professions. *Daedalus*, 92, 669–688.
- Bassok, M., & Holyoak, K. J. (1989). Interdomain transfer between isomorphic topics in algebra and physics. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 15, 153–166.
- Bayles, M. (1988). The professions. In J. C. Callahan (Ed.), *Ethical issues in professional life* (pp. 113–123). New York: Oxford University Press.
- Bereiter, C. (1995). A dispositional view of transfer. In A. McKeough, J. Lupart, & A. Marini (Eds.), *Teaching for transfer: Fostering generalization in learning* (pp. 21–34). Mahwah: Lawrence Erlbaum.
- Borghans, L., Golsteyn, B., & de Grip, A. (2007). Wat leert onderzoek ons over informeel leren? [What does research teach us about informal learning?]. In *Handboek Effectief Opleiden* (pp. 65–84). Amsterdam: Elsevier Human resources.
- Bourdieu, P., & Wacquant, L. (1992). An invitation to reflexive sociology. Chicago: The University of Chicago Press.
- Claxton, G. (1999). Wise up: The challenge of lifelong learning. London: Bloomsbury. Collins.
- Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction*. *Essays in honour of Robert Glaser* (pp. 453–494). Hillsdale: Erlbaum.
- Cormier, S. M., & Hagman, J. D. (1987). Introduction. In S. M. Cormier & J. D. Hagman (Eds.), Transfer of learning: Contemporary research and applications (pp. 1–8). San Diego: Academic.
- Crook, D. (2008). Some historical perspectives on professionalism. In B. Cunningham (Ed.), Exploring professionalism (pp. 10–28). London: Institute of Education, University of London.
- De Groot, E. (2012). Learning of veterinary professionals in communities: Using the theory of critically reflective work behaviour with regard to evidence based practice. Doctoral dissertation, Utrecht University.
- Doornbos, A. J., & Krak, A. J. A. (2001). Learning processes and outcomes at the workplace: A qualitative study. In J. N. Streumer (Ed.), Perspectives on learning at the workplace: Theoretical positions, organizational factors, learning processes and effects (pp. 53–64). Proceedings of the second conference on HRD research and practice across Europe. Enschede: Twente University
- Eraut, M. R. (1994). Developing professional knowledge and competence. London: Falmer.
- Eraut, M. R. (1998). Development of knowledge and skills in employment. Brighton: University of Sussex Institute of Education, Education Development Building.
- Evans, L. (2008). Professionalism, professionality and professional development. *British Journal of Educational Studies*, 56, 20–38.
- Evetts, J. (2003). The sociological analysis of professionalism: Occupational change in the modern world. *International Sociology*, 18, 395–415.
- Friedson, E. (1986). *Professional powers. A study of the institutionalization of formal knowledge*. Chicago: The University of Chicago Press.
- Friedson, E. (1989). Theory and the professions. Indiana Law Journal, 64, 423-432.

- Friedson, E. (2001). Professionalism. The third logic. Cambridge: Polity Press.
- Gardner, H., & Shulman, L. S. (2005). The professions in America today: Crucial but fragile. *Daedalus*, 13–18.
- Greenwood, E. (1957). Attributes of a profession. Social Work, 2, 45–55.
- Horstman, K., & Houtepen, R. (2008). Van sturen naar leren [From steering to learning]. In *Goed werk. Verkenningen van normatieve professionalisering* (pp. 106–124). Amsterdam: Uitgeverij SWP.
- Illich, I. (1971). Deschooling society. London: Calder and Boyars.
- Kubr, M. (2002). Management consulting. A guide to the profession. Geneva: International Labour Organization.
- Kwakman, C. H. E. (1999). *Leren van docenten tijdens de beroeploopbaan* [Learning of teachers during their career]. Doctoral dissertation, Nijmegen University.
- Larson, M. S. (1978). The rise of professionalism: A sociological analysis. Berkeley: University of California Press.
- Leonard, D., & Swap, W. (2005). *Meesterschap* [Mastership]. Amsterdam: Uitgeverij Business Contact.
- Lubell, M. S. (1978). The significance of organizational conflict on the legislative evolution of the accounting profession in the United States. College Park: University of Maryland.
- Maister, D. H. (2006). Why (most) training is useless. Retrieved from http://davidmaister.com/articles/1/96/
- Marsick, V. (2001). *Informal strategic learning in the workplace*. Paper presented at the second conference on HRD research and practice across Europe. Enschede. The Netherlands.
- Mayer, R., & Greeno, J. G. (1972). Structural differences between learning outcomes produced by different instructional methods. *Journal of Educational Psychology*, 63, 165–173.
- Millerson, G. (1964). *The qualifying associations: A study in professionalisation*. London: Taylor & Francis Group.
- Nonaka, I., Reinmoeller, P., & Senoo, D. (1998). The 'ART' of knowledge: Systems to capitalize on market knowledge. *European Management Journal*, *16*, 673–684.
- Onstenk, J. H. A. M. (1997). Lerend leren werken. Brede vakbekwaamheid en de integratie van leren, werken en innoveren [Learning to work in a learning way. Broad craftmanship and the integration of learning, working and innovating]. Amsterdam: Katholieke Universiteit Niimegen.
- Parsons, T. (1954). The professions and social structure. In T. Parsons (Ed.), *Essays in sociological theory* (pp. 34–49). New York: Free Press.
- Perks, R. (1993). Accounting and society. London: Chapman & Hall.
- Riel, M., & Lepori, K. (2011, April). A meta-analysis of the outcomes of action research. Paper presented at the annual meeting of the American Educational Research Association conference. New Orleans.
- Ruijters, M. C. P. (2006). *Liefde voor leren* [Love for learning]. Doctoral dissertation, Utrecht University.
- Ruijters, M. C. P., & Simons, P. R. J. (2006). Het leerlandschap van organisaties [The learning landscape of organisations]. *Develop*, 2, 54–63.
- Runté, R. (1995). Is teaching a profession? In G. Taylor & R. Runté (Eds.), *Thinking about teaching: An introduction* (pp. 288–299). Toronto: Harcourt Brace. Retrieved from http://www.uleth.ca/edu/runte/professional/teaprof.htm
- Ryan, R. M., & Deci, E. L. (2012). Multiple identities within a single self. A self-determination theory perspective on internalization within contexts and culture. In M. R. Leary & J. Price Tangney (Eds.), *Handbook of self and identity* (pp. 225–246). New York: The Guilford Press.
- Salomon, G., & Perkins, D. N. (1989). Rocky roads to transfer: Rethinking mechanisms of a neglected phenomenon. *Educational Psychologist*, 24, 113–142.
- Schinkel, W., & Noordegraaf, M. (2011). Professionalism as symbolic capital: Materials for a Bourdieusian theory of professionalism. *Comparative Sociology*, 10, 67–96.
- Schön, D. (1983). The reflective practitioner. How professionals think in action. London: Temple Smith.

- Schwab, J. (1965). Supervisor, biological sciences curriculum study, biology teachers' handbook. New York: Wiley.
- Sennett, R. (2008). De ambachtsman [The craftsman]. Amsterdam: Meulenhof.
- Simons, P. R. J. (1990). Transfervermogen [Transfer-ability]. Inaugural lecture. Nijmegen: Quick Print.
- Simons, P. R. J. (1999). Transfer of learning: Paradoxes for learners. *International Journal of Educational Research*, 31, 577–589.
- Simons, P. R. J., & Verschaffel, L. (1992) (Red.). Transfer: Onderzoek en onderwijs [Transfer: Research and education]. *Tijdschrift voor Onderwijsresearch*, 17, 3–16.
- Tonkens, E. (2003). Mondige burgers, getende professionals. Marktwerking, vraagsturing en professionaliteit in de publieke sector [Responsible citizens, tamed professionals. Martkets, demand drivenness and professionality in the public sector]. Utrecht: Nederlands Iinstituut voor Zorg en Welzijn.
- Van Gunsteren, H. (1994). Culturen van besturen [Cultures of governmental boards]. Amsterdam/ Meppel: Boom.
- Van Houten, D. (2008). Professionalisering: Een verkenning [Professionalizing: An exploration]. In G. Jacobs, R. Meij, H. Tenwolde, & Y. Zomer (Red.), Goed werk. Verkenningen van normatieve professionalisering (pp. 16–35). Amsterdam: Uitgeverij SWP.
- Von Krogh, G., Ichijo, K., & Nonaka, I. (2000). Enabling knowledge creation. Oxford: Oxford University Press.
- Van Veldhuizen, B. (2010). Werkend Leren, Lerend Werken. Professionele ontwikkeling van docenten in persoonlijk en organisatieperspectief [Learning while working, working while learning: Professional development in personal and organizational perspective]. Doctoral dissertation, Utrecht University.
- Wanrooy, M. (2001). *Leidinggeven tussen professionals* [Leadership between professionals]. Schiedam: Scriptum.
- Watson, J. B. (1913). Psychology as the behavourist views it. Psychological Review, 20, 158–177.
- Watson, T. (2003). Professions and professionalism should we jump off the bandwagon, better to study where it is going? *International Studies of Management and Organization*, 32, 93–105.
- Weggeman, M. C. D. P. (2007). Leiding geven aan professionals? Niet doen! [Leading professionals? Don't do it!]. Schiedam: Scriptum.
- Wenger, E. (1998). Communities of practice. Cambridge: Cambridge University Press.
- Wilensky, H. L. (1964). The professionalization of everyone? American Journal of Sociology, 70, 137–158.