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Managing experts in higher education

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Expertise is a key resource for all institutes of higher education, since a significant part of their staff work in expert tasks. In the context of an organisation, expertise provides tools for an independent approach to work, within which structural hierarchies may be replaced by different group-based modes of work or networks. Nevertheless, supervision still plays a role in the management of experts. This study looks at management on the departmental level from the viewpoint of the use of human resources. The study is based on legislative and administrative data and interviews conducted in two profit centres at two polytechnics in 2004.

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In Finland, higher education is provided by two parallel systems: universities (including art academies) and polytechnics (non-university sector, AMK). The university sector is financed by the state and, in 2004, comprised about 174,000 students, about 14,000 teachers or researchers and 14,000 other staff. In 2004 the polytechnics sector in Finland comprised about 132,000 students, about 5,900 teachers and 4,600 other staff (Sources: AMKOTA and Statistics Finland - Finnish Central Statistical Office). The polytechnics system was established in the early 1990s, and the Polytechnics Act (2003/351) decrees that a permit for managing a polytechnic institution can be granted to local authorities (municipalities) or a joint municipal body (municipal federation), to the state or to private organisations (a registered Finnish Limited Company or Foundation). Most of the 29 permanent polytechnics have a particular responsibility for regional development. They provide instruction in subjects from several sectors, leading to degrees with an emphasis on professional practice, and strive to maintain close connections with working life.

Many persons working as experts are highly visible in the regional innovation system as representatives of their host polytechnics. In fact, it is typical of polytechnics that expertise is highly specialised, so that knowledge is generated in many different situations without particular steering or guidance from the organisation. Such situations include discussions between experts, networking activity or teaching. Knowledge is basis for all activities of higher education institutes. (i.e. Kekäle 2001, pp. 42-43)

No unified model exists for defining the mode of work of experts or the managing of experts. According to Amitai Etzioni (2000) it is typical for a professional organisation that knowledge is produced, applied and maintained and its content is communicated between the members of the organisation. Judging by this definition at least, educational organisations are professional organisations.

Polytechnics are defined as professional organisations, but many practices found in them may resemble those of service organisations. On the other hand, a polytechnic can also simultaneously be a true, knowledge-intensive professional organisation and include a service organisation to provide support services such as ICT or Library. These work in close collaboration, but may be placed in different administrative structures.

In practice, the ideas of knowledge management are very much to the fore in the management of organisations of tertiary education. On the level of polytechnics departments, the need for managing experts has increased because of the growing number of experts. More and more, the teaching staff includes persons with a postgraduate degree, which affects the broadening of their job descriptions. Similarly, the number of researchers and R&D personnel is increasing.

In shaping public organisations it is typical for Finnish Polytechnics to emphasise a mode of operation in which hierarchies are lean and work is partly carried out through networks, the functioning of which cannot be predicted. The challenges to the expertise required in organisations are linked not only to knowledge management, but increasingly to the capability of transferring personal knowledge to others. Solutions enabling this transfer may be very practical, such as removing the barriers of co-operation between people working in different organisations or allocating resources to expert co-operation. These are some of the issues highlighted in managing experts.

As regards the polytechnics, one of the current points of emphasis is new expertise, which means reflective expertise based on professional co-operation between several disciplines. It is not based so much on instrumental know-how as on the ability to retrieve and analyse information. Defined thus, expertise is not a stable characteristic, but a renewable one.

Certain characteristics may be identified in expert work which appears to be repeated in different work communities. Among other things, experts emphasise the transferability of their services, the need for
Supporting and creating motivation as part of the supervision of their work, the meaning of feedback and professional development. (Aarrevaara-Ahonen-Öberg, 2003) In polytechnics, experts are employed as teachers, researchers, and as officials with the formal responsibility of presenting matters to decision-making bodies, to name the most important categories.

Expertise may be understood as the responsibility over certain tasks, as autonomy over one's work. In this case, those working as experts are often not required to report to others on their progress. This concept of expertise suits a culture which emphasises results, in which the organisational control is not focused on how the work is done but on the results achieved. It is possible to work very independently in many different kinds of tasks, which means that work itself does not define the expert's degree of autonomy.

The basic tasks may be fairly clearly defined, but in practice organisations serve as tools for interpersonal collaboration. In what are called lean educational organisations, the role of collaboration may be emphasised. The autonomy of action linked to expertise cannot be based on a clearly defined basic task, if no such task exists. In a lean hierarchy, the expert must often earn their autonomy in the work community by means of their competence.

**Formal competence and expertise**

In polytechnics, expertise is also defined in formal terms. Above all, competence requirements are applied to the president and the teaching staff. The Act on Polytechnics (9 May 2003/351) defines the duties of a polytechnic and the type of staff which it must employ in order to discharge them. The Decree on Polytechnics (15 May 2003/352) further defines the qualification requirements, stating that the teaching staff must have an academic degree, the teachers of vocational or professional studies must have a minimum of three years of work experience, and principal lecturers must have a postgraduate degree. In Finland there exists a teacher education, which consists of 60 ECTS credit points in 2005 and is fairly extensively used to define a shared knowledge basis. Those appointed as lecturers or principal lecturers in polytechnics must have completed this education or, if they have not, will have to do so within three years of their appointment. It helps then in moving from one occupational area in industry, commerce or public administration to another such as education, training and research. (Robson et al. 2004, pp. 186-187)

The Decree also defines the expert duties expected of the teaching staff, including the development of teaching in the field, administrative duties, further training and education to maintain professional expertise, and the ability to carry on research and development. In practice it appears that the polytechnic teachers do not manage all these duties to a uniform degree. Examples of this are R&D duties for which designated persons are employed. The new Polytechnics Act also defines expertise on other levels, such as decision-making. The Act on Polytechnics requires that the Board of Directors of a polytechnic includes representatives of the fields taught.

Legislation sets the formal requirements for expertise, but its content is only defined through practice. The expertise envisaged in legislation may be further defined in the performance agreement between a polytechnic and the Ministry of Education. On the profit centre level, it is possible to enhance the organisation's competence by means of selective recruitment. In this case, the development of the expertise potential depends on how the unit defines the responsibilities for developing the overall entity.

When defining expertise on the personal level, the tools applied may include job descriptions, appraisals, and different project duties. During the appraisal of a principal lecturer, for example, goals may be set in the areas of pedagogical development, research and development, project activity, or the development of expertise or completion of a further degree.
Judging by the data collected for this study, it seems that the areas in which polytechnic teachers wish to develop their expertise are their work as teachers, development in their discipline and project know-how. The background to these development domains can be found in the work carried out in all polytechnics during the past ten years to improve the educational level of all key personnel. As regards the completion of higher degrees, the main weight now appears to be moving in the direction of R&D expertise. This being so, the core area of the development expertise will be the identification of research topics central to each field and their successful conversion into projects.

The image of experts as an organisational resource is generally very positive. However, experts are very special members of the work community, posing many challenges to leadership. Karl Erik Sveiby (1997) has described experts on the basis of extensive empirical data. According to him experts are characterised by the fact that they like complex problems, professional development and freedom in looking for solutions. According to Sveiby, it is typical for experts that they want to have up-to-date tools. They enjoy public recognition, but do not like rules, routine tasks or bureaucracy which curbs their freedom. Sveiby describes experts as persons who are engrossed in their work and care little about their pay, their leisure or their organisation.

According to Sveiby’s description, experts tend to stand out from the rest of the work community. They appear to have little respect for people who are less knowledgeable. At the same time, however, experts also look up to those who are better experts than they are. As a consequence, experts would seem to belittle traditional superiors. Experts themselves are fairly rarely capable of working through others or acting as leaders or managers.

**Development of expertise**

Sometimes experts feel they are “accidental academics”, who became specialists in their branch by accident. (Lindholm 2003, p. 618) In reality, the development of expertise is goal-oriented, long-term activity, which is determined by the development needs of both the expert as an individual and of the organisation.

The Decree on Polytechnics (15 May 2003) provides the framework for this development, stating that a full-time teacher shall, in addition to his or her teaching and counselling duties and other duties, also strive to develop expertise. At the core of this expertise lies the development of teaching in the expert’s own field, which should bear in mind the development of working life. Development should also include the curriculum and admission procedures.

According to the Polytechnics Decree, a full-time teacher is also required to manage tasks related to research and development, to participate in training to maintain and improve their professional skills and to maintain their practical knowledge of working life and its conditions. It is a path to profession holds knowledge, autonomy and responsibility. (Robson et al. 2004, p. 184) Another field of development could consist of the tasks required by service in the administrative bodies of the polytechnic.

Obviously, the development of expertise as defined by the Polytechnics Decree covers so wide a field that it will have to be specified more clearly on the departmental level. On the one hand, an expert should be expected to be able to independently set priorities among the development areas defined in the Decree. On the other hand it is important that the profit centre also co-ordinates clearly the development interests of different experts. This is a question of human resource allocation, which is one of the basic tasks of an organisation.

In Finland’s previous system of tertiary education, the content of work was governed by the teaching load of each teacher. Even today the curriculum is sometimes very rigid, and implementation requires
strong co-ordination on the unit level. As regards the curriculum, an expert’s autonomy is often less absolute than as regards research and development. To a great extent, although not exclusively, the polytechnics have adopted a system within which teaching staff is expected to work 1,600 hours annually, but the allocation of these hours per day or per week is not specified (annual work time). This has enabled the simultaneous implementation of the experts’ autonomy and the organisation’s control. It may be said that the adoption of annual work time system clarified the role of the expert in the polytechnic. It also gives the superiors and subordinates a tool for discussing an expert’s tasks during the appraisals, for example, which form a part of steering by performance.

Annual work time system is a fairly broad interpretation of the use of the working hours, but it does provide a concrete tool for the development discussions during appraisals. These discussions may be used to agree, for example, on the shares of teaching, evaluation, and research and development of the expert’s working hours. In an expert’s work, time is a key resource. Frequently the expert has quite a lot of leeway in how to use the annual work time, which makes it possible to reach individual goals. Within Sveiby’s frame of reference, the adoption of annual work time may be regarded as a factor which increases freedom and thus motivates an expert. The individual goals set by the experts themselves may be crucial for development. Thanks to them, the experts may also maintain the marketability of their skills independent of the organisation. On the other hand, the retention of collective expertise in the organisation requires that the organisation has defined goals for the development of expertise.

In addition to the use of annual work time system, the development areas of an expert are controlled by the priorities set by the profit centre. The tool used for this is the allocation of resources according to the priorities set. The controlling of these resources allows the superior to support the expert so that s/he may periodically focus full-time on research or development projects. As a rule, this requires external funding to enable arrangements for stand-ins. So far, there are no comprehensive statistics on such arrangements, since data on them is not uniformly collected in databases such as AMKOTA, containing statistical information on all Finnish polytechnics.

The profit centre may steer the development of experts by means of HRM, which entails such things as the purchase of tools and investment in training. As regards these, the practices appear to vary fairly widely depending on the unit. On the one hand, the allocation of resources may be very strictly controlled by the superior. On the other hand, the specified use of resources seems to be fairly extensively delegated to the experts themselves.

On the basis of the data used in this study, it is fairly rare that the decision of the detailed use of resources is exclusively delegated to the expert. It is more frequent that the superiors rely on the expert’s own ability of defining preferences. This means that participation in professional seminars or conferences will not be denied, but normal procedure regarding work-related travel, including written proposals, will have to be observed. Even though the autonomy of the experts’ work is often emphasised, they are subject to the same administrative procedures designed to ensure openness and transparency as other employees.

**Managing an Expert's Work**

According to Sveiby’s observation, the management of experts is a challenging task, for to a certain extent expertise is a personal characteristic. For this reason, traditional authority is not sufficient for the management of experts. Among others, Amitai Etzioni (2000) has studied the management of experts as a traditional organisational role conflict. Experts demand that the leading of a professional organisation and the work of a manager should be based on familiarity with their field. This means that the best possible manager is an acknowledged expert in the field.
The management faces a dilemma because the superior is also required to be a professional manager. This is different from a managership based on expertise. Professional management enables the focusing of challenges on the overall goal of the organisation, which means that expertise is not a key factor in the manner of organisation. Management as profession, on the other hand, requires a broader and professional competence. Professional management also stresses needs of the organisation. Professional management enables the focusing of challenges on the overall goal of the organisation, which means that expertise is not a key factor in the manner of organisation. (Etzioni, 2000, pp. 115-117)

According to data for this study, only few experts do wish to become superiors. This is understandable, for the ability to bear an overall organisational responsibility is distinctly different from the ability to expand personal expertise. A position as superior also entails risks. The diminishing of one's own expertise, which may be quite narrow, may challenge the expert's position in their organisation and networks. Thus, taking up managerial duties may appear as an irrevocable choice away from duties as an expert. Some experts prefer to stay with tasks which they have learned, without assuming overall responsibility. But some are developing their academic profession rather than academic estate in terms of Neave and Rhoades (1987). This is why the current personnel development policy of the Finnish government bodies recognises that an expert career without managerial responsibilities is equally motivated and desirable as a managerial career, which provides other types of job enrichment.

In the Finnish system of higher education, superior positions are mainly reached through work in expert duties, which enhances the role of such duties in a professional organisation. With the increasing number of managerial tasks the expert's ability of maintaining their expertise within a narrow field is converted into more broad-based challenges concerning the development and management of the whole organisation. If this happens, one of the problems emerging may be the lack of appreciation from experts. According to Sveiby, as was noted, experts do not appreciate traditional superiors. Nevertheless, even experts apply for traditional management posts, such as directorships in profit centres. If the superior then fails to give up their previous role as expert, management may focus on concerns which do not further the overall interest of the organisation.

Competence in managing experts is not gained through work as an expert, because management requires capabilities not required by expert work, i.e. capabilities which develop a holistic approach. In practice, however, the way to directorship generally goes through expert duties. The data of this study appears to indicate that superiors do not actively apply managerial means to constrain the work of experts.

According to Sveiby, experts maintain up-to-date tools. This is a factor which may be used to assess management. The more autonomy experts have in their choice of tools, the less they will discuss shared practices with their superiors. A managerial approach would mean that the superior defines what tools the subordinate may have. Data for this study seems to indicate that superiors have a high threshold in defining the tools of experts.

Larger purchases are generally based on proposals submitted to the superior. This also applies to purchases which require the organisation's support. Examples of this are new, extensive sets of computer software. At a minimum, purchases of this magnitude always require that the superior has defined the principles to be applied. These principles are also discussed in work communities. The experts' autonomy may be maintained by creating practices by which they may make smaller purchases independently.

Experts are encouraged to network and to represent their polytechnic in a goal-oriented manner. Such activity often requires hospitality. It appears that the practices related to this vary widely. In certain polytechnics, experts provide hospitality as needed, at their own discretion, while in others even a cup of coffee may require an authorisation by the superior. This is a matter which may have a high symbolic value.
The matters described above may be financially negligible, but a discussion of them allows the formulation of principles which are important for the management of experts. This is because superiors do not necessarily possess a wide variety of means for controlling the work of experts, because of their high autonomy. On the other hand, experts themselves may regard the discussion of details as frustrating. However, in a matrix organisation such discussions are necessary.

All discussions, even if concerning details, strengthen the expert’s view of the contribution which their input has in the organisation. On the other hand, they create another dimension in the matrix. Even an expert occasionally requires their superior’s views on when a task is complete or when a sufficient level of quality has been reached. Without such discussions, the expert’s work may become too dissociated from the organisations goals.

A matrix organisation also creates the problem of commitment to one’s unit. The tasks of experts are defined through co-operation and networks. It is typical of experts that their tasks are defined in co-operation through the different hierarchical levels of their organisation and through networks. Perhaps experts are attracted by networks because their mode of operation stresses the lack of formal constraints, even though the work done in networks may be substantial in scope.

Judging by data for this study, experts prefer a networking mode of work and also introduce practices familiar from it to the established organisation. This is visible in practices which bypass the immediate superior, for example. Many things should be formally agreed on with the immediate superior, but by the time s/he is informed by the expert, they may largely have been decided on. The transfer of a networking mode of operation into an established organisation leads to the challenging of established modes of work. This would mean that in teaching, for example, teachers would decide fairly independently what they will teach and when. Students, on the other hand, would decide fairly independently what they will learn and when. Although all parties act with apparent independence, the result is often predictable to a detail – in the sense mentioned by Cohen and March, anarchistic, but organised.

A situation favouring organised anarchy is sometimes also caused by the fact that the work of experts is linked with responsibilities pertaining to the whole polytechnic. An example of this is that the work of experts in individual profit centre is co-ordinated at the level of the educational group. This mode of operation is occasionally necessary, but it may create conflicts between the expert and the superior. The superior holds him-/herself responsible for the unit’s results, while the expert may wish to use his/her expertise where it makes the biggest impact.

Experts should have a clear mandate for their activity in tasks or networks involving the whole polytechnic. Regarding such mandates, practices vary even within one polytechnic. Providing support to the expert by means of discussion may constitute a sufficient mandate. Such discussions between the profit centre manager and the expert may concern the practical applications and directions which are favoured by the profit centre in the tasks being discussed.

The above does not mean that it is possible for the superior to exercise a very detailed supervision over the expert's work. In situations where the expert's work deals with long-term co-operation with another party, such as another polytechnic, it is possible to define the expert's share in more detailed agreements. In short-term tasks, tasks of short duration or one-off in nature, a written agreement may simply cause unnecessary transaction costs due to the detailed definition of the task; a sufficient mandate would be a discussion on the time needed between the expert and the superior.
Experts as members of the work community

Although experts stress their independence, they are nevertheless not motivated to work with no feedback. It is also difficult to develop one’s work in the absence of feedback. Experts may receive organisational feedback from their superior during annual development discussions, for example, but this is not enough. They also need more timely feedback, which will also have a rapid impact on work under way.

In order to conduct the expert, the superior can make use of means provided by the management system. These include the use of result incentives, such as the personal salary supplement to be introduced in polytechnics owned by municipalities. Another example is the delegation of more challenging tasks after a good performance. Special tasks break the routine and may give the polytechnic access to important areas of expertise. Something that is always available and financially attractive is public praise, which is a strong incentive.

Providing feedback to an expert is difficult, particularly when it has to be negative. Judging by data collecting to this study, negative feedback from a superior may be regarded as unnecessary pulling of rank. Overall, the use of power enabled by the hierarchy may create tension. On the other hand there are fields in which experts feel that hierarchies reflect the true competences of the organisation’s members. Hospitals, for example, have hierarchical structures which only allow progress through education or training and a systematic proof of the accumulation of competence based on criteria approved by the hierarchy. This way of thinking may be reflected in some educational fields in the polytechnics.

Judging by data for this study at least, no uniform culture of providing feedback to experts can be discerned. However, it does appear that negative feedback is more often indirect. As regards tasks managed independently, it may be difficult to provide concrete feedback to the expert, since the superior does not necessarily have detailed information on how the task was carried out. In this case, the superior is entitled to assume that the expert is capable of converting a more symbolic feedback to his or her own language. This assumption is the more natural since the work itself is not necessarily very concrete.

Another matter which appears to be shared by the units studied here is the low degree of collective feedback. This may be a reflection of the experts’ autonomy, which has the consequence that the work community is not informed in detail of the content of the expert’s work. Thus, feedback according to data for this study is more often provided by the superior than by the work community. On the other hand, the lack of collective feedback may reveal an operating culture in which the community only discusses general concerns and matters of principle. In such cases, the community does not necessarily feel that they can discuss the expert’s work in detail.

Experts’ demand for a managerial style

When experts do not receive sufficient feedback for their work, they may reproduce a similar “accordion movement” in the organisation. Their work has a meaning, and for this reason the “accordion movement” is genuine and significant. For some experts, work is the centre of their whole life, so that it is difficult to separate one's own personality from the work. For others again it may be important to be included in a work community and to exchange information. In the latter case the “accordion movement” is not necessarily a problem.

In principle, everybody is entitled to receive feedback on their work, and experts are no different from others in this respect. Their manner of receiving feedback may still be different from the established
procedures in the work community. One of interviews in this data revealed that experts may also consider it as feedback if the work community affirms the expert’s autonomy over their work. According to the interviewee, the expert may regards such an affirmation of their autonomy as a mark of appreciation. Judging by data for this study, autonomy appears to be a more important measure of appreciation than more concrete rewards.

Experts also vary as to their degree of dependence on the organisational practices. Assuming a joint responsibility over the work community may be a difficult challenge. On the other hand, as is borne out by Sveiby’s observations, the experts’ strive to a stronger independence may decrease their interest in acting on the terms of the formal organisation. In functional issues, however, experts still need the organisation and its support services, as do other employees.

Some polytechnics have a wealth of uniform procedures which the experts are expected to follow. These may apply to purchases or travelling, for example. Practices which apply to the whole polytechnic may affect the expert’s freedom of using resources. In other polytechnics, however, procedures are affected by practices only used in individual units or even by individual experts. Such practices may act as central factors determining the autonomy of experts. The stricter the model of steering by performance applied in a polytechnic, the more strictly the expert’s goals and freedom are controlled. The consequences of this serve both to reward the experts and to decrease their motivation.

From the organisation’s point of view it would be most effective if experts could work with as little steering as possible. From this viewpoint, an efficient management style rests on the work community and its modes of operation. The demand for a management style which takes the community into account can also be discerned in data for this study. However, my interpretation is that it does not appear as strongly as the demand for a managerial style. On the other hand, an established, managerial mode of operation does not necessarily support collective expertise or the transfer of information across the whole organisation. One of the crucial challenges of management is the transfer of information across organisational interfaces. From a community viewpoint, this is exactly the locus of management, instead of the day-to-day management of experts.

The challenge faced by the managing of experts in polytechnics is the transfer of expert knowledge, to make it accessible to the community. Organisations may improve their legitimacy by acting in networks, which creates challenges to expert work.

The personnel management in the polytechnics enables practices which differ from those at universities or art academies. The polytechnics’ mode of operation leaves the primary responsibility for the work to the experts themselves, which means that networking is not always co-ordinated. A managerial mode of operation in its turn may prevent networking by limiting the use of communication channels and resources. It appears that an important trend in polytechnics is to manage experts as leanly as possible.

Networking occurs primarily in the domain of knowledge transfer, i.e., in the domain in which experts have a strong capability of managing and defining their work. The greatest obstacle to networking is the expert’s own use of time, not the preferences created by management. Very few replies revealed factors which caused constraint to networking or produced negative experiences related to activity in networks. Consequently, each expert should be able to evaluate their use of time individually in terms of their annual work time.

1 The persons selected for interviewing were the Head of Department and a key staff member selected from the same field in both polytechnics.
Without being told, experts may often know which networks are suitable for their activity and how they should act in them. This may be a passive constraint, but it is an effective one. In a close-knit, managerially led work community superiors may assume that their subordinates share their goals and values.

As regards networking, it is difficult and probably unnecessary for the superior to control the expert’s use of time. In contrast, it is meaningful that the superior monitors the objectives of networking and the degree to which they are attained. During development discussions, the superior may give the expert a general mandate for networking, and in the same context it is possible to agree even on detailed objectives. Teaching or research co-operation between different polytechnics may, for example, be governed by agreements, which may provide a concrete basis for determining the use of time.

References:


The Act on Polytechnics, Finland (9 May 2003/351)

The Decree on Polytechnics, Finland (15 May 2003)


