

The professionalism of professors at German *Fachhochschulen*¹

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Abstract

In the debate about the (de-)professionalising effects of current higher education reforms in Germany, the non-university institutions (Fachhochschulen or FH) have mostly remained silent. Unlike the university professors, FH professors do not seem to regard managerial and market-oriented reforms as a threat to their professionalism. While the reasons may not be hard to find, the question arises as to how the FH professors construct their professional ideal. Based on a survey, this article develops a model of the FH professors' normative professionalism, analyses what prevents them from achieving it, and finds that the professors perceive their substantial teaching obligation as the principal threat to their professionalism.

The (de-)professionalisation debate at German universities

As in most European countries, the massification of higher education, the expectation of its instrumentality and performativity as well as budgetary constraints have triggered profound changes also at German universities. The current reform agenda combines the Bologna process with the introduction of market-oriented, competition-based and managerial elements, including the partial replacement of traditional committee-based academic self-governance by hierarchical structures and powerful management positions. For German universities which used to have 'a unique social structure; almost [...] an inverted hierarchy, with initiative, and even power, moving from below upwards' (Ashby 1967, 420), forming an organisational

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environment ideally suited for professors and allowing them to act as ‘small monopolies in thousands of parts’ (Clark 1983, 140), these reforms are having a profound cultural impact.

In the official discourse on higher education reform which is shared by federal and *Länder* governments, and funding bodies as well as industry, this process is referred to as ‘professionalisation’ and seen as a response to the ‘German universities’ urgent need of professional managers’ (Sonnabend 2003, 19). Traditional self-governance is considered unprofessional because most academics are neither qualified nor experienced as managers. University professors, on the other hand, insist that defining their own standards, applying their own scientific judgements, making decisions about their own affairs on the basis of criteria that reflect the inner logic of the academic world, forms an integral part of their professionalism. This concept of professionalism is rooted in the Humboldtian principle of ‘solitude and freedom’: professors and students should exist not one for the other, but both for the sake of scholarship, seeking intellectual solitude (in the sense of detachment: the disinterested pursuit of knowledge, uncontaminated by any obligation to train for a profession or to apply the knowledge to useful ends), and being given the freedom to pursue it (Marga 2004; Pritchard 2004; Schimank 2005). The possibility of a powerful university leadership deciding to serve political or market interests and imposing its priorities upon the professors fundamentally contradicts this Humboldtian ideal. From the professors’ point of view, managerial reforms pervert the term professionalism: ‘The colonisation of research and teaching by economic and administrative imperatives does not mean professionalisation but deprofessionalisation’ (Stock and Wernet 2005, 9).

This academic professionalism debate which is taking place in similar ways in many countries is equally as much about higher education management as it is about competing discourses on what ‘professional’ means. Discourses make use of the constructive power of language

(Foucault 1972): they frame the way people think about the objects they construct. In fact, discourses are systems of statements which construct these objects in the first place (Parker 1992). Hence on the surface managerial reforms may curtail the professorial self-regulation, but more profoundly, the professionalism of university professors is being publicly reconstructed through the managerial reform discourse.

Absence of a (de-)professionalisation debate at German *Fachhochschulen*

In the non-university sector of the higher education system in Germany, very similar reforms have been received quite differently. At the *Fachhochschulen (FH)* or ‘Universities of Applied Sciences’, the professors do not appear to see the current higher education reforms as a way of being deprofessionalised. They do not seem concerned about the prospect of working in a more hierarchically organised environment and under more competitive and efficiency-driven conditions. In fact, the *FH* professors mostly remained silent when more and more reporting and evaluation procedures were introduced; when competitive and performance-based financing mechanisms (Handel, Jaeger, and Schmidlin 2005) were implemented; and in particular when

“The powers of the executive positions of the rectors/presidents and deans of faculties/departments were significantly strengthened at the expense of professors, junior academic staff, other staff and students, and intra-institutional committees. In many cases, major supervisory rights were transferred to a board comprised of external representatives” (Klumpp and Teichler 2008, 116; see also Maas 2006; Waldeyer 2006).

Between January 2004 and January 2008 the magazine *Die Neue Hochschule* – official organ of the professional association of *FH* professors – did not feature a single major article critically discussing the ‘professionalisation’ of academic management. Instead, various

articles even endorsed managerial reforms and clear leadership structures, e.g. to facilitate the establishment and successful operation of public-private partnerships and competence networks (Hanika 2004) or more generally to improve the co-operation of *Fachhochschulen* with the private sector (Anz 2005).

Possible reasons for the different reactions to managerial reforms in German higher education are not hard to find. After 200 years, Humboldt's ideas are still part of the cultural genetic code and the identity of many German universities and their professors. Seeing their 'solitude and freedom' being curtailed for economic and administrative reasons affects them not only in their work but especially symbolically. The *Fachhochschulen*, on the other hand, were never based on Humboldtian principles. Since their inception in the late 1960s, their purpose to provide vocationally-oriented, practically useful education has been exactly opposed to Humboldt's ideas of disinterested, detached study and scholarship. One might even say that the *Fachhochschulen* were created as an answer to specific challenges, namely widening access to higher education and meeting the industry's increased need for qualified graduates, which the elitist Humboldtian university was unable to meet.

Another possible reason for the dissimilar reactions to similar reforms lies in the different professorial career paths at universities and at *Fachhochschulen*. Unlike professors in English-speaking countries who are senior academics holding a departmental chair, professors in Germany are tenured academics with a civil-servant status. Applicants for university professorships must normally hold a doctorate and have demonstrated their special aptitude for research or artistic work at post-doctoral level over several years. At the *Fachhochschulen*, the post-doc research requirement is replaced by the requirement that applicants must exhibit particular achievements with regard to the application of scientific findings and methods in several years of professional activity (HRG 2007, Section 44) *outside* academia. The

particular socialisation which *FH* professors receive prior to joining a *Fachhochschule*, e.g. in the private sector, may explain the acceptance of reforms that are met with great scepticism and reluctance by university professors. Hierarchical organisations, performance reviews, and a general orientation towards customers and the market had been part of most *FH* professors' pre-academic lives for several years, shaping their views and influencing the values and norms they are willing and able to accept.

A third possible reason why the managerial reforms may be much less controversial for *FH* professors than for their university colleagues has to do with another component of the German reform package: 'The Bologna Process can be expected to reduce the distinction of the curricular roles between the *FHs* and the universities' (Klumpp and Teichler 2008, 120). The introduction of bachelor and master degrees at both types of institution has clearly strengthened the *Fachhochschulen* in relation to the universities. Under these circumstances it is understandable that *FH* professors do not perceive the reform package as threatening to the same degree as university professors.

Purpose and structure of this article

While the analysis of higher education reforms in Germany has led to a renewed interest in the theory of professions which had long been neglected (Stock and Wernet 2005), and in the nature of academic professionalism at universities (Lenhardt 2005; Oevermann 2005; Stock 2005), the literature failed to extend this discussion to the non-university sector. Conversely, the recent literature on German and other European non-university higher education institutions and their teachers (Teichler 1999; Kyvik and Skodvin 2003; Kyvik 2004; Klumpp and Teichler 2008; Lepori 2008; Teichler 2008; Witte, van der Wende, and Huisman 2008) failed to take the issue of academic professionalism into account. Not even the *FH* professors'

magazine *Die Neue Hochschule* has published an article dealing with the professorial professionalism at *Fachhochschulen*.

Being an *FH* professor myself, and having followed the debates on academic professionalism and the (de-)professionalising effects of higher education reforms in Germany and the UK, I was surprised by the lack of consideration this topic had been given with respect to the *Fachhochschulen*. I started wondering how *FH* professors construct their own normative professionalism, and how they see themselves in relation to this construct.³ It is my objective in this article to offer some tentative answers to these questions, drawing on the results of a survey of over 250 *FH* professors.

The remainder of this article is organised as follows. First, a more comprehensive picture of the *Fachhochschulen* and their professors will be drawn, offering also a comparative perspective. In the main part, after an introduction of the survey method and the sample, a causal model of the *FH* professors' normative professionalism will be developed on the basis of the survey results. This ideal will then be contrasted with aspects of the *FH* professors' perceived actual professionalism, and the deviations will be analysed. The article will be concluded with a critical discussion of the academic professionalism at the *Fachhochschulen* and its perceived threats.

The *Fachhochschulen* and their academic drift

With the exception of Italy, higher education in all Western European countries is provided by traditional universities and by a number of other types of institutions, including the 'new' universities in the UK. Although the binary higher education systems in Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Netherlands, Norway, Portugal, Sweden, and

³ By referring to *FH* professors in the third person I aim to separate the survey results from my personal views.

Switzerland, the dual system in Austria, and the unified systems in Spain and the UK (Kyvik 2004) differ greatly, their roots are similar, going back to the strong increase in student numbers and the growing demand for a more vocationally oriented higher education in the 1960s. Offering more of the same higher education by expanding the existing universities was found unsuitable to cater for the increasingly heterogeneous student populations. Moreover, universities were seen ‘as too rigid, too academic in the pejorative occupational preparation, too elitist and inegalitarian, too unconcerned with the quality of teaching, too geographically remote for much of the population, and often too expensive’ (Grubb 2003, quoted in Machado et al. 2008, 248). Governments therefore took the pragmatic decision to upgrade existing vocational training institutions, and to integrate them in the higher education systems (Teichler 2008).

In West Germany, most *Fachhochschulen* were established between 1969 and 1971. After the German reunification in 1989, a number of *Fachhochschulen* were founded also in East Germany (BMBF 2004). Between 1990 and 2008, the *Fachhochschulen* absorbed practically the entire increase in student numbers in Germany. Today, at 184 *Fachhochschulen*, 573,000 students are enrolled, representing 30% of the German student population (Destatis 2008b). The *Fachhochschulen* concentrate on engineering and other technical disciplines, business studies, social work, design-related areas, and public administration. Their mission is to prepare students for the world of work by offering a practice-oriented, yet scientifically-based education.

Teaching is the core activity of *Fachhochschulen*. Their study programmes take place under school-like conditions, with more narrowly defined curricula, more lectures and tests, as well as more frequent personal contacts with professors than at universities. Teaching facilities at the *Fachhochschulen* tend to be better, and classes are typically much smaller. Yet the

student-teacher ratio at the *Fachhochschulen* (27:1) is higher than at the universities (18:1 excluding medical education) (Destatis 2008a). This is the result of the lack of junior teaching staff at the *Fachhochschulen*, and of the university professors' lower teaching load of eight hours per week during the two annual lecture periods, which compares to the *FH* professors' 18 or 19 hours per week.

On the other hand, unlike the university professors, *FH* professors do not have an individual obligation to be research-active. In most *Länder*, the research obligation only rests with the *Fachhochschulen* as institutions. Their research is applied rather than basic, often taking place in collaboration with regional businesses. Public research funding programmes have been launched specifically for the *Fachhochschulen*. But even though they now grant bachelor and master degrees like the universities, the right also to award doctorates is still denied to the *Fachhochschulen*. A comparison of the percentages of working time spent in 1992 on teaching, research and other functions by German professors at universities and *Fachhochschulen* is given in Table 1. Today, the share of working time spent on administration is probably higher for both types of institutions, and *FH* professors might use a little more of their time on research.

Table 1. Percentage of working time spent by German professors on major functions in 1992

	Universities	<i>Fachhochschulen</i>
Teaching	34	62
Research	37	17
Administration	14	12
Service	8	7
Other	6	2

Based on Enders and Teichler (1996), 456.

Since their creation in the late 1960s, *Fachhochschulen* have become more similar to universities in many respects. Witte, van der Wende, and Huisman (2008) who compare the institutional status of the Dutch *hogescholen*, the French *grandes écoles*, and the German *Fachhochschulen* with the status of the universities in these countries, note that in 1998, ‘the gap between the two main institutional types was smallest in Germany and largest in France’ (221), and that through the Bologna process, ‘the gap between the two institutional types [in Germany] was significantly reduced’ (228). Klumpp and Teichler (2008) add that ‘The German *Fachhochschulen* can be viewed, in comparative perspective, as one of the most ambitious alternative types of higher education institutions to the universities in Europe’ (119). The ‘academic drift’ of the *Fachhochschulen*, i.e. their gradual convergence towards universities (Neave 1996; Teichler 2008), may yet continue. Judging by the most frequently recurring topics in the magazine *Die Neue Hochschule*, their current ambition is to improve their research conditions (Dudenhausen 2005; Eickmeyer-Hehn 2005; Zirn 2006), and to obtain the right to award doctoral degrees (Maas 2007; Stohrer 2007).

Meanings of professionalism

I will now turn to the analysis of the *FH* professors’ construct of their own professionalism. In this article professionalism is understood in two ways: (1) as a normative concept representing some ideal which *FH* professors as individuals and as an occupational group explicitly or implicitly aim to achieve; (2) as the degree to which a professor or the professors come close to the normative professionalism, implying different possible levels of actual professionalism.

In the survey the expression ‘good professor’ was used as a synonym for normative professionalism for two reasons. Firstly, the professionalism of a ‘good professor’ is not reminiscent of traditional professions. It corresponds much more to the ‘new’ academic professionalism defined ‘not in terms of status and self-regulation, but in terms of values and

practices' (Nixon et al. 2001, 234). Professionalism in this sense connotes 'improvement in the quality of service rather than the enhancement of status' (Hoyle 2001, 148). The 'good professor' implies 'good service' achieved through the application of professional practices and the adherence to professional values.

Secondly, being a 'good professor' at a *Fachhochschule* means first and foremost being a good academic teacher. Every answer by a respondent has to be seen in its relation to teaching because this is what the *FH* professors do most of the time, what shapes their thinking, and what distinguishes the *Fachhochschulen* from universities. Quality of service at *Fachhochschulen* necessarily refers to the quality of teaching, irrespective of services which may be provided additionally (e.g. research, consulting, administration).

Sample and methodology

The analysis of professionalism is based on an anonymous online survey of 259 *FH* professors which was conducted in October and November 2007. To recruit participants for the survey, the presidents or rectors of 25 *Fachhochschulen* in Germany were contacted by email and asked to support the survey by encouraging their institutions' professors to complete an online questionnaire. The invited *Fachhochschulen* formed a balanced mix of small and large, business-oriented and technical, public and private institutions in different geographical locations. However, since anonymity was crucial due to the sensitivity of some of the issues involved, the questionnaire did not ask the respondents for their names and employing institutions. In consequence, the mix of *Fachhochschulen* actually represented in the sample is unknown.

The largest group of survey participants were engineering professors with 46%, followed by 31% professors of business-related subjects. 53% of the respondents had over ten years of

experience in their job. 67% of the respondents worked at medium-sized *Fachhochschulen* with 2,000 to 10,000 students. The fact that practically all respondents considered themselves ‘good professors’ and agreed with the statement ‘I demand a great deal of myself’ suggests that highly committed and motivated professors were overrepresented in the sample. This sampling bias was predictable but unavoidable, since the survey was anonymous, and no material or reputational rewards were offered for participating.

The online questionnaire included 53 items grouped in 12 sections, as well as a field for comments. The items were either four-point forced-choice Likert-scaled or dichotomous. Most items were related to teaching to reflect the particular nature of the *FH* professorships. The field for comments was placed at the end of the questionnaire. It was used by 107 respondents who left statements of up to 140 words, indicating a strong wish on the part of the *FH* professors to express themselves and to be heard.

Existing literature on the quantitative analysis of professionalism did not provide much guidance for the survey design. Previous attempts to measure professionalism had categorised professionals on the basis of predefined criteria (Howell and Dorfman 1986; Mathieu and Hamel 1989), validated indicators of professionalism (Hall 1968; Hayward-Farmer and Stuart 1990; Swailes 2003) or assessed attitudes towards professionalism (Jha et al. 2006; Blackall et al. 2007; Tsai et al. 2007)

Five key elements of professionalism

According to Furlong et al. (2000), knowledge, autonomy and responsibility are the most widely accepted criteria of professional work. By and large, these criteria also emerged from the survey, along with two others. The following key elements of the *FH* professors’ professionalism were identified: expert knowledge, responsibility towards students,

autonomy, effort, and research. The first four seem essential for any legitimate claim to professionalism at *Fachhochschulen*, the fifth is more ambiguous. This section briefly presents the data supporting the selection of key elements.

Expert knowledge is an almost self-evident key element of professorial professionalism. 82% of the respondents agreed or strongly agreed with the statement, ‘My expert knowledge is up to date’. To keep their knowledge up to date, 71% used sideline jobs in their field of expertise, 57% benefitted from the supervision of student projects for external clients, 19% had seized the opportunity of a research sabbatical leave, and 16% had taken a practical sabbatical leave within the previous five years. As shown in Table 2, each of these four knowledge-enhancing activities correlates highly significantly and positively with perceived up-to-dateness of expert knowledge.⁴

Table 2. Correlations between knowledge-enhancing activities and perceived up-to-dateness of knowledge

n = 259	Coefficient	My expert knowledge is up to date.
I had a sideline job in my field of expertise.	rank-biserial	.435**
I ran projects with students for external clients.	rank-biserial	.298**
I took a practical sabbatical leave.	rank-biserial	.500**
I took a research sabbatical leave.	rank-biserial	.540**

** Correlation is significant at the 0.01 level (2-tailed).

⁴ The items listed on the left-hand side of Table 2 are dichotomous, whereas the item at the top is rank-scaled. Therefore the rank-biserial correlation coefficient was needed here. To test for significance, a modified Mann-Whitney U test was used (Willson 1976).

If teaching is understood as a profession based on scientific knowledge, then its professional knowledge about teaching and learning must also be scientific. Such knowledge is disseminated in books, journals, and teaching courses. However, while 34% of the respondents had attended a compulsory or voluntary teaching course during the previous two years, only 16% made use of the literature on teaching, and 44% seemed to have received no introduction to teaching whatsoever. Instead, the respondents relied mostly on their own reflective and experimental capabilities to enhance their teaching. Hence (scientific) professional teaching knowledge did not seem to occupy a prominent position in the *FH* professors' ideal of professionalism and had to be excluded as a key element.

Responsibility towards students was confirmed as a key element because 100% of the respondents agreed or strongly agreed with the statement, 'I feel responsible towards my students'. By contrast, only 75% felt this responsibility towards the public, 71% towards their employers, and a low 54% towards their colleagues. The survey participants seemed to take their feelings of responsibility so much for granted that none of them commented on this aspect at the end of the questionnaire. Only 13% of the respondents reported the existence of a code of conduct for academic staff at their institutions, which indicates that responsibility towards students and other stakeholders may mean different things to different professors even at the same *Fachhochschule*.

Effort emerged as a key element as 100% of the respondents agreed or strongly agreed with the statement, 'I demand a great deal of myself'. Since *FH* professors receive little or no material reward for putting in extra effort, their choice to do so must be based on immaterial values. This finding resembles Helsby's (1995) observation that effort in the sense of 'doing the best you can' constitutes a central aspect of teachers' construct of professional behaviour.

Professional self-determination was perceived as high or very high by 90% of the respondents. For 96% autonomy had been an important or very important career choice criterion, and for 84% it continued to be an important or very important source of motivation. More importantly, all combinations of items related to self-determination correlate highly significantly and positively with the respondents' perception of their being a 'good professor' as shown in Table 3.⁵ This suggests that the professors' perceived autonomy is closely connected with the extent to which they consider themselves to be professional.

Table 3. Correlations between self-determination and perceptions of being a 'good professor'

n = 259	Coefficient	I consider myself a good professor.
Self-determination was important for my career choice.	Kendall τ	.161**
My self-determination motivates me.	Kendall τ	.198**
I have a high degree of self-determination in my job.	Kendall τ	.288**

** Correlation is significant at the 0.01 level (2-tailed).

Research was a particularly interesting key element emerging from the survey. Given the *FH* professors' clear focus on teaching, one might have expected research to be a somewhat optional part of their professionalism. But 71% of the respondents claimed that the prospect of becoming research-active had been an important or very important motivator for their career choice. 19% had taken research sabbatical leaves during the previous five years. Perhaps most importantly, 42% of all 107 unprompted comments deplored the lack of possibilities for research at their *Fachhochschulen*.

⁵ For rank scaled survey data resulting from the Likert scale items, correlations were computed using Kendall's Tau b denoted τ rather than the Spearman coefficient to avoid problems with tied ranks.

But these comments also made it difficult to assess the real importance of research for professionalism. They came only from a subsample, possibly not representing a majority opinion; and the reasons provided as to why research possibilities are important were diverse and not always related to values, practices or the enhancement of quality of service. At least in part they seemed to be an expression of the desire for more recognition and status than teaching has to offer. Hence research is a slightly ambiguous key element which may or may not be essential for the professionalism of the *FH* professors.

Teaching may look like another obvious key element. By choosing a career at a *Fachhochschule*, every professor expresses a commitment to teaching. With a 98% agreement, teaching turned out to be the most important career choice criterion, and 96% of the respondents agreed that it was an important or very important motivator for them. But as *FH* professors spend over 60% of their working time on teaching-related activities (Enders and Teichler 1996), it seems inappropriate to treat teaching like any other key element and to separate it from expert knowledge, responsibility towards students, effort, autonomy, and research. Rather, these key elements must be seen as enablers of professional academic teaching. Teaching represents the context in which these key elements are embedded. They all contribute to professionalism which is, as I have pointed out, a professionalism of teaching.

A model of normative professionalism

In this section, empirical relations will be established between the five key elements. The aim is to derive a model which is coherent with the survey data and reflects the *FH* professors' construct of their own professionalism. Table 4 contains the correlation coefficients and p values of all possible combinations of the five key elements and professionalism.⁶

⁶ For this correlation analysis, all unprompted comments criticising the lack of research possibilities at *Fachhochschulen* were coded as '1', all other comments as '0'. When computing the rank-biserial correlation

Table 4. Correlations between key elements and the perception of professionalism

	Coefficient	a	b	c	d	e
a I demand a great deal of myself (n=259)	Kendall τ					
b I feel responsible towards my students (n=259)	Kendall τ	.229**				
c My expert knowledge is up to date (n=259)	Kendall τ	.127*	-.055			
d I have a high degree of self-determination (n=259)	Kendall τ	.140*	-.008	.157**		
e I consider myself a good professor (n=259)	Kendall τ	.365**	.054	.264**	.288**	
f Unprompted comments on lack of research possibilities (n=107)	rank-biserial	.050	.043	-.023	.104	.208**

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

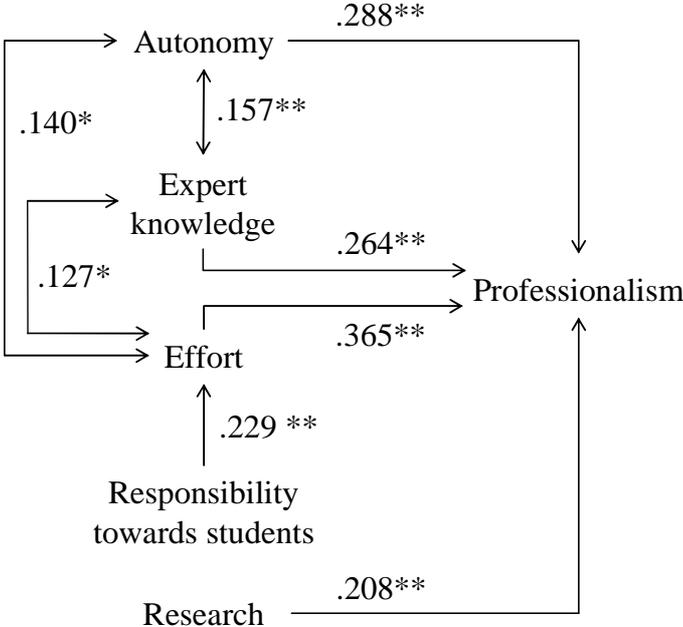
Six correlations are significant at the 1% level and two more are significant at the 5% level. If only the significant relations are depicted graphically as a network and all other relations are ignored, the graph in Figure 1 emerges. The arrowheads reflect hypotheses about the direction or causality of the relations which are the result of plausibility considerations rather than survey data (Miles and Huberman 1994; Nash 2006). Firstly, if professionalism is accepted as an outcome rather than an input, no arrows may point away from it. Secondly, if one accepts that values drive behaviour and not vice versa, arrows must point away from responsibility.

Autonomy, knowledge and effort, on the other hand, may be bi-directionally related, forming a triplet of mutually reinforcing relations. Autonomy allows professors to pursue their interests and thus, as a positive side effect, to gain new or update existing knowledge.

Autonomy as a motivator also drives effort. The more effort professors put in their work, the more they will be trusted and the more autonomy they will be given. It also takes extra efforts to keep expert knowledge up to date (see Table 2). Expert knowledge, finally, limits the

coefficients the sample size was reduced to the number of responses that included unprompted comments (n = 107).

extent to which professors can be controlled and substituted externally, thus guaranteeing their autonomy, and it encourages effort by providing opportunities for interesting projects and making teaching more enjoyable.



* Correlation is significant at the 0.05 level (2-tailed).
 ** Correlation is significant at the 0.01 level (2-tailed).

Figure 1. Hypothetical causal network of professionalism

Effort occupies a central position in the model as a transformer of autonomy, expert knowledge and responsibility into action. Without effort, responsibility to students would effectively be irrelevant for professionalism, and autonomy and knowledge would result in a purely self-centred, status-oriented kind of professionalism.

Normative versus actual professionalism

This section concentrates on discrepancies between the *FH* professors’ normative professionalism and their perception of the degree to which they, as individuals and as an occupational group, actually achieve this ideal. The distinction between the individual

professors and the group was a very clear pattern in the data. As individuals, they seemed to perceive their own actual professionalism as very high, portraying themselves as hard-working, responsible towards their students, autonomy-loving, and motivated to engage in research. Less than a dozen self-critical comments were left by respondents.

As an occupational group, however, the respondents' view of their actual professionalism was more differentiated and critical, mainly because institutional constraints were taken into account. Mounting administrative paperwork, high teaching loads, partly to be delivered outside the respective fields of expertise, and the lack of research possibilities were mentioned as reasons for falling short of the professional ideal. These points did not come across as excuses of underachievers – underachievers seemed absent from the sample anyway – but rather as expressions of genuine concern about specific key elements of their professionalism.

64% of the survey respondents agreed that their reporting duties had increased over the past few years, and 19% of the unprompted comments were about increased paperwork and administrative demands. These observations are symptoms of higher education reforms introducing new quality management and accountability procedures – a 'permanent cultural revolution' as one respondent remarked – whilst parallel to this budgets either remained constant or were cut, sometimes drastically. As a result, the bulk of the extra work has to be absorbed by the professors. Surprisingly, the additional administrative workload had no significant effect on the respondents' perceptions of their autonomy and professionalism. One reason might be that the *FH* professors accept this negative aspect of the reform package because overall, it has strengthened their position in relation to the university professors.

Several respondents combined their complaints about paperwork with criticism of their teaching loads. One respondent stated that 'we could be really good if we didn't have to be

our own administration and teach 18 hours [per week]'. Another respondent felt that 'since due to all this teaching and administration no time remains for R&D, I fear for my longer-term professional competence'. These statements capture a possible indirect negative effect which high teaching loads and administrative obligations may have on expert knowledge by disabling participation in research activities. However, no significant correlation existed in the survey data between the lack of research possibilities and expert knowledge, or directly between critical comments about high teaching loads and expert knowledge.

Writing about their teaching obligations, a number of survey participants added remarks such as: 'The *Fachhochschule* is increasingly mutating into a school'; 'The *FH* are actually not universities but vocational schools' and 'we are gradually turning into better vocational school teachers'. These pejorative comparisons suggest a direct negative correlation between comments on teaching loads and professionalism. Yet again the quantitative data did not support this hypothesis.

Where comments about high teaching loads did matter statistically was in the context of research possibilities. Table 5 contains a frequency analysis of all comments about research and teaching loads. It shows that of all comments criticising the lack of research possibilities at *Fachhochschulen*, almost two thirds also criticised the high teaching loads. The perceived research-disabling effect of large teaching obligations is expressed by the highly significant correlation⁷ of 0.495 in Table 6 further below.

Although an *FH* professor's teaching load can be reduced in favour of research, substitute teaching staff must be financed with third-party funds which first need to be raised with great

⁷ The Phi correlation coefficient between the two dichotomous items was computed using the formula given on <http://www.andrews.edu/~calkins/math/edrm611/edrm13.htm#TETRA> (accessed on 5 February 2008).

expenditure of time. Only about 10% of the *FH* professors overcome this hurdle regularly (Thum and Schmidt 2005). This confirms the respondents' claim that their teaching loads deprive them of research possibilities.

Table 5. Contingency table for types of unprompted comments made by survey participants

	Comments on high teaching load	Comments NOT on high teaching load	Sum	
Comments on lack of research possibilities	28	17	45	42%
Comments NOT on lack of research possibilities	9	53	62	58%
Sum	37	70	107	100%
	35%	65%	100%	

A second significant effect of high teaching loads was found in relation to the professors' teaching focus. One respondent wrote that 'Due to the permanent expansion of the range of study programmes offered at my *Fachhochschule* and the simultaneous reduction of [teaching] posts I have to [...] teach more and more courses outside my area of expertise.' In fact, 40% of all respondents claimed to teach courses not corresponding to their specialisation. It appears that their heavy teaching loads force the professors to offer so many different courses that some of them may not fall into their respective fields of expertise. As a result, 'professors are degraded to transmitters of textbook and internet knowledge', as one commentator put it.

Table 6 gives an overview of the significant correlations just discussed. Figure 2 visualises them and embeds them in Figure 1. The newly added elements are printed in bold italics. As before, arrowheads show the hypothetical direction of causality.

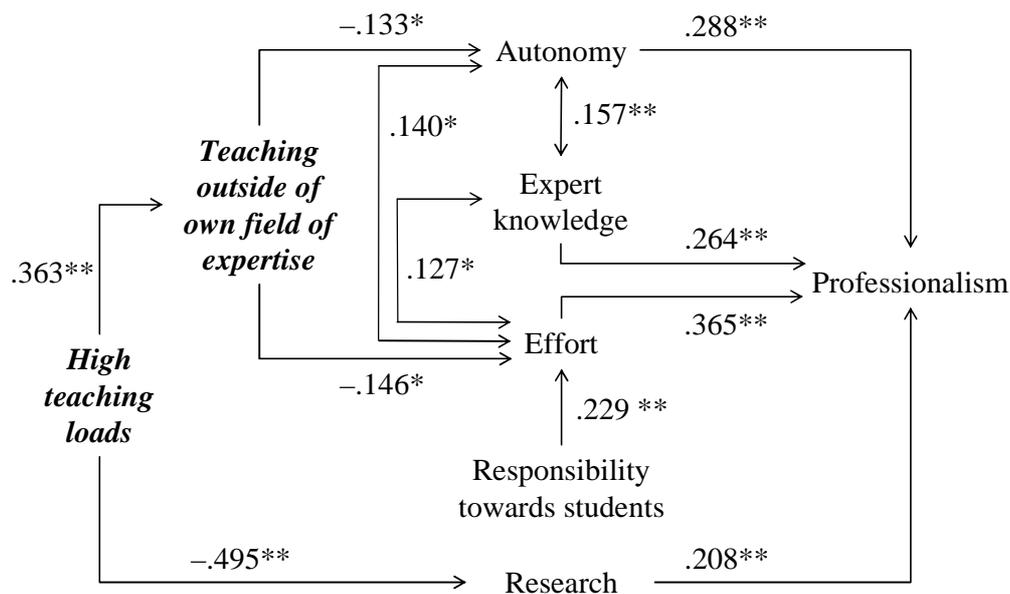
Table 6. Correlations indicating the effect of high teaching loads on key elements of professionalism

	Coefficient	a	b	c	d
a I demand a great deal of myself (n=259)	Kendall τ				
b I teach courses outside of my field of expertise (n=259)	Kendall τ	-.146*			
c I have a high degree of self-determination (n=259)	Kendall τ	.140*	-.133*		
d Unprompted comments on lack of research possibilities (n=107)	rank-biserial	.050	-.031	.104	
e Unprompted comments on teaching load (n=107)	rank-biserial	-.004	.363**	-.120	.495**†

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

† Phi correlation coefficient



* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Figure 2. Hypothetical causal network of professionalism and institutional constraints

According to Figure 2, two related institutional constraints – high teaching loads and the necessity to teach outside one’s fields of expertise if the quantitative teaching obligation cannot be met otherwise – have a significant negative impingement upon key elements of

professionalism. Survey respondents complaining about their high teaching loads were more likely to offer courses outside their fields of expertise, leading to a lower effort level and to the perception of less professional autonomy. The above-mentioned research-disabling effect of the professors' 18 or 19 hours of weekly teaching is depicted with an intuitively plausible negative sign. The negative overall effect of high teaching loads on professionalism can be shown by multiplying the correlation coefficient signs along each connection between the two items in Figure 2.

Conclusions

At the outset of this article I stressed the *FH* professors' absence from the public debate on academic professionalism in Germany. Whilst university professors claim to be deprofessionalised by managerial reforms and struggle to sustain their traditional Humboldtian discourse, the *FH* professors appear rather unaffected. This led me to wonder how the *FH* professors might construct their professionalism.

In designing the survey I assumed with Hoyle (2001) that professionalism is about the improvement in the quality of service, and I agreed with Nixon et al. (2001) that it would best be understood in terms of values and practices. Given the strong teaching orientation of the *Fachhochschulen*, the survey thus concentrated on eliciting and understanding the *FH* professors' values, attitudes, and actions related to quality academic teaching, and the assumption underlying the survey was that the *FH* professors' professionalism is a professionalism of teaching.

The survey data suggests that *FH* professors construct their professionalism around five key elements: expert knowledge, responsibility towards students, autonomy, effort, and research. The first four are essential for professionalism; the fifth is more ambiguous. The key elements

are not isolated or independent but appear to be connected by a small number of statistically significant relations which can be assumed to be causal. Teaching itself has been excluded as a key element not on the basis of evidence, but because of its overriding importance for professionalism: if the *FH* professors' professionalism is about quality improvements in teaching then teaching is no mere ingredient of professionalism but the context in which the other key elements become relevant.

An aspect which I had expected to play a central role for the *FH* professors' professionalism is professional knowledge. According to Luhmann (2002), a teacher's professional knowledge is the knowledge of how to teach, not what to teach. Practically all respondents presented themselves as reflective practitioners and experimenting educators, but only few also appreciated the scientific knowledge on learning and teaching. If teaching is taken to be a profession based on scientific knowledge, then not more than one-third of the respondents can be said to value professional teaching knowledge and to actively seek it by attending teaching courses or consulting the literature. Therefore, professional knowledge could not be included as a key element in the model of the *FH* professors' normative professionalism.

The survey did not provide any indication of a serious conflict between the *FH* professors' ideal of their own professionalism and current higher education reform, thus confirming the impression conveyed by the media. Interestingly, the *FH* professors' perceived professional autonomy was high and only insignificantly affected by the introduction of new accountability procedures, even though their *de facto* autonomy is much more restricted than the autonomy enjoyed by the university professors, who teach less and are free to pursue their research interests. Obviously, professional autonomy is a relative concept: what is autonomy for one need not be autonomy for another.

The *FH* professors seem to see their professionalism threatened not by the reform-related institutional changes affecting their work, but rather by the institutional *status quo*. As the model in Figure 2 illustrates, their main concern is directed at their substantial teaching obligation and its – perceived – negative consequences for research possibilities, teaching focus, effort, autonomy, and ultimately their professionalism. This finding offers yet another possible explanation why the *FH* professors react so differently to the German higher education reforms from the university professors: reform and change have been and will remain for the *Fachhochschulen* the main allies in their ‘academic drift’ towards the universities.

Finally, two limitations of this study need to be mentioned which might affect the validity of its results. The first limitation is conceptual, the second one empirical. By asking closed-ended questions about possible aspects of professionalism, the survey questionnaire may have suggested certain meanings of professionalism to the respondents and excluded certain other meanings. The survey responses can thus be expected to reflect not only the respondents’ constructs of their professionalism, but also my own construct which undoubtedly influenced the design of the questionnaire. The second limitation consists in the sampling bias pointed out earlier. Due to the overrepresentation of highly committed and motivated *FH* professors in the sample, the findings of this study may not be representative for all *FH* professors. Had this been a representative survey, I conjecture that effort would have received less support as a key element of professionalism, and high teaching loads would have been stressed even more as a potential threat to the *FH* professors’ professionalism. Yet I can see no reason why the results of a representative survey would have been *qualitatively* different from those reported in this article.

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