## Old and New Dreams — A New Knowledge Nexus or Just Academic Drift? by Harald Jarning (Oslo University College, Norway)

Introduction

Norwegian higher education has almost always been totally provided by the state. The growth of mass higher education has accordingly been considered as a public endeavor and included a universalistic welfare state agenda. As in most parts of Europe, the provision of mass higher education has also been developed within the framework of a hierarchical system. From the early 1970s, a segmented system was established. Professional and vocational short cycle programs are, since their start in the 1970s and up till today, dominant parts of the college sector, and positioned next to full universities. This binary system, with key legislative differences between the full universities and the other mainly short cycle higher education institutions, has been a recurrent area for struggle and gradual reforms.

In the wake of the broadened knowledge policy perspectives found in all OECD countries over the last two decades, major institutional and regulatory reforms of the university colleges and the binary system have been introduced in 1994 and in 2003. Through these reforms, all higher education institutions in Norway now have a common framework and are given the mandate to base their educational programs, teaching and learning 'on the best from research, professional and artistic development work'. This institutional mandate, in combination with growth in research funding and in stronger academic and professional competence among the faculty, have been driving forces behind gradual changes of curricula and pedagogy as well as of expanding research efforts in major state college program areas.

Through the national implementation of the demands of the Bologna Process from 2003, applications for change in accreditation of institutional status have been introduced as a framework for the development of a more flexible division of labour within the higher education sector. A key difference in institutional position is that as a *full university*, an institution can, without further external accreditation, offer educational programs at all levels, while *university colleges* must apply for external accreditation for study programs above the bachelor level. Furthermore, from 2008, a Norwegian blue paper (NOU 2008:3) have led to decentralised collaboration and a merger of institutions as main tools for a structural development and rationalisation of higher education. At the present moment, then, collaboration and merger processes, often including strategies in order to be accredited as a full university, are central in many Norwegian regions.

This contribution will analyse some of the current developments in Norwegian higher education, focusing specifically on the dilemmas between professional and

general academic, and constructive and critical knowledge concerns. Examples are drawn from the merger process-and the common-strategy of two university colleges in the Oslo-area. Knowledge priorities and profiles in relation to professional educational fields, as well as in relation to research will be areas of focus. The contribution however not only addresses the emergence of a specific knowledge profile and knowledge nexus in a new university, but also the public role of the new institution due to this profile and nexus.

The case: Knowledge strategies in the merger of two university colleges

In the Oslo area, a process that seeks to build a new university from two university colleges, *Høgskolen i Akershus* and *Høgskolen i Oslo*, resembles the latest national policy patterns. These two university colleges provide bachelor programs that certify candidates for welfare professions as well for other professionally oriented fields. A knowledge profile for a new institution based on these knowledge domains meets a number of challenges. The challenges emerge from the relatively weak research traditions in these colleges, as well as from unsystematic institutional support outside the well-established universities and the system of disciplines.

From 2009 onwards, strategies and plans for the design of a new institution have been in focus. A key concern has been the clarification of the knowledge profile of this new university, combining constructive and critical engagement with professional education and the combined academic and practical knowledge base of new professional R&D fields. Included in the profile is a renewed concern regarding the relations between professional expert fields and public interests in the increasingly globalised social and cultural surroundings, in a capital area of a European peripheral region. A draft for a common strategy was published by the end of March 2010. The definite decision to establish a fusion was taken by the boards of the two university colleges in December 2010. Starting in August 2011, Oslo and Akershus University of Applied Sciences will include 16.000 students and a staff of 1.600.

In the Norwegian context, this new institution is by far the largest of the new institutions in the higher education sector. Internally as well in the national context, the gradual development of the knowledge profile of the Oslo and Akershus University of Applied Sciences can be seen as a test case for the strength of forces of academic standardisation versus possibilities for broader professionally oriented institutional changes.

In order to frame in more detail the tendencies and tensions, first it is important to focus in more detail on the specific knowledge profile of university colleges. The three key knowledge areas in the university college sector include:

- Undergraduate teaching and learning this constitutes by far the dominant scholarly activity
- Research & Development (R&D), with a close connection to composite professional fields – this often starts from developmental needs of street level professionals rather than from within discipline-based research
- Professional services and knowledge exchange Networking, knowledge exchange and innovation constitute a third core knowledge area

Against the background of this profile, a major source of conflicts on knowledge profiles arises. There is the concomitant consolidation of a mainly discipline-based PhD-system in the university sector at large and an expanding triadic relationship between education, research and service in the professional fields dominating the university colleges. Supporting this triadic knowledge nexus is a combined scholarly and practical focus on deeper understanding of professional and research-based forms of knowledge. A rigid national graduate degree system is in the forefront of the tensions between the two knowledge policy currents with their focus, respectively, on discipline patterns and on professional and composite knowledge packages and related welfare contributions.

## More than Academic drift?

In a recent European investigation that compared research efforts and patterns of development in higher education institutions outside the established universities (Kyvik et al., 2010), the Norwegian university college sector, along with the polytechnic sector in Switzerland and Finland, seem to be telling examples of expanding combinations of research, study and other more traditional knowledge tasks.

The chapter on Norwegian university colleges by Kyvik and Larsen (2010) emphasises how the state college sector was given a research mandate with a profile different from the broader and more general orientation of the older universities. In a comparative perspective, a peculiar feature of the Norwegian trajectory seems to be the relatively large general part of R&D-funding included in the national basic grant of the university colleges and the accordingly rather low part of the funding stemming from competitive sources like research councils, public innovation agencies, and private sector R&D projects. As a contrast to these general findings, Larsen's and Kyvik's analysis points to the tensions between an increasing differentiation of aims and research profiles on the one hand and a common and more rigid qualification, reward and accounting approach for R&D on the other hand. The reason for these tensions is that incentives have almost uniformly been rooted in traditions of the older universities and the system of disciplines:

A logical consequence of such a funding model and reward system is that institutional leaders and staff members might give priority to research related to disciplines instead of concentrating on research and development related to the improvement of teaching and professional practice, or the solving of practical problems in local industry or public services. (Kyvik & Larsen, 2010, p. 235)

Hence, in their comparative analysis Lepori and Kyvik make a distinction between a research drift seen in many countries and an academic drift or mainstreaming of new institutions (Lepori & Kyvik, 2010, p. 270). As a consequence, it becomes important for new institutions in this context to strategically develop a more consistent interplay between educational program areas, research profiles, and participation in developmental work. Before looking in more detail to the strategic reorientation in the case of the Oslo and Akershus University of Applied Sciences, it is helpful to explore some general tendencies in relation to knowledge strategies. The following themes

are used as a guideline for this short exploration:

- Knowledge profiles system of disciplines and system of professions
- Welfare contributions private goods and public goods
- Knowledge nexus binary academic (research-teaching) or triadic professional (R&D-teaching-(professional) service)

Knowledge profiles - rooted in disciplines and/or in professions

A focus on changing dynamics in knowledge production in post-industrial societies leading to the development of more open systems of knowledge production, is a key theme in the 'Mode 2 thesis' presented by Gibbons et al. in the book *The New Production of Knowledge* (Gibbons et al., 1994). The core of their analysis is that a parallel expansion of potential knowledge producers due to the massification of higher education and a more differentiated demand for specialist knowledge, have generated a habitat for more open forms of continuous innovation and knowledge production. These new forms have partly broken the R&D-monopoly of dominant research institutions like universities and independent research institutes. The changes simultaneously affect the outer as well as the inner differentiations of organised knowledge.

Mode I is discipline-based and carries a distinction between what is fundamental and what is applied; this implies an operational distinction between a theoretical core and other areas of knowledge such as the engineering sciences, where the theoretical insights are translated into applications. By contrast, Mode 2 knowledge production is transdisciplinary. It is characterised by a constant flow back and forth between the fundamental and the applied, between the theoretical and the practical. (Gibbons et al., 1994, p. 19)

The Mode 2 orientation can be seen as a move away from the old generalist model of interdisciplinarity, and includes a focus on the context of application and transdisciplinarity. In relation to professional work, this means that it becomes relevant to focus on knowledge questions embedded in professional problem solving as a supplement to traditional Mode I research approaches.

Welfare functions – the social contributions outside the Academe

In the Norwegian context, the term 'velferdsvirkninger' — welfare functions — has been introduced as a more modest approach to the Habermasian knowledge interests (technical, practical, emancipatory). Unlike the Habermasian approach, welfare functions are less exclusively bound to specific domains of research and scholarship. Professor of philosophy and national pioneer in the institutionalisation of ethics of research and scholarship, Knut Erik Tranøy (1986; 1988) has differentiated between four main welfare functions: technology, professional practice, warning, and self-realisation. Warning and forecasting for instance are examples of transdisciplinary welfare functions in different fields: meteorology and geology, but also in psychology and social research.

Burton R. Clark coined, as a part of his research on entrepreneurial universities, the notion "the research – scholarship – teaching nexus" (Clark, 1995). This nexus is, according to Clark, one of the contemporary core characteristics of good research universities, and with a clear reference to the classic Humboldtian model of the 'research university'. Inspired by the work by Clark, and particularly to address the specificities of the whole family of institutional newcomers within the sector of higher education, the term *knowledge nexus* can be helpful. The term can be used for the description and evaluation of interchanges of differing packages of scholarly and professional knowledge tasks in these institutions.

In small short-cycle professional programs like teacher seminars, technical colleges and schools of nursing, that were the basis for the regional colleges from the 1970s on, the absence of internal R&D funding practically excluded research from the knowledge nexus. The typical binary knowledge nexus of this model of further education would be teaching combined with first hand practical experience through internships in for instance schools and hospitals. Universities on the other hand, according to modern traditions that seek to emphasize the distance between academia and society, had their form of a binary knowledge nexus in the interchanges mainly of teaching and research (Clark, 1995).

During the last decades, these binary patterns have met a number of challenges. At policy level (internationally as well as nationally), innovation has become a permanent theme in the formulation of knowledge policies. This signals a reorientation towards a triadic knowledge nexus affecting most higher education and other research institutions as well. In their analysis of R&D in the relatively new polytechnic sector in Finland, Välimaa and Neuvonen-Rauhala (2010) use the term *training and development* (T&D) to denote a new variety of a triadic knowledge nexus.

The training and development (T&D) projects are developed in the context of application (...) aiming at hanging practices in cooperation with practical actors. This is not to say that these T&D projects would not utilise research. What we intend to say is that research activities are applied in the course of the T&D project, if and when needed. For this reason, the traditional academic research is not necessarily the starting point for a development project. (Välimaa & Neuvonen-Rauhala, 2010, pp. 152–153)

Typical for this knowledge nexus is the challenge to find approaches that might support reflective scholarly action beyond "ivory tower"-orientations still typical for older universities, as well as beyond the one-sided authority of first-hand experience and training typical for many professional fields.

A new institution with a professional knowledge profile

For the exploration of the merger process leading to the Oslo and Akershus University of Applied Sciences, and in particular its strategic reorientation and knowledge profile, the recently published strategy document is used as a point of departure.<sup>2</sup> A few examples that are mentioned in the strategy document should give an indication of



the attempt to develop a specific knowledge profile and to find the necessary balance between general scientific and scholarly values, important to any university, and the specific concern for professional and other related knowledge fields.

In the text, the main argument for the efforts to build a new university is related to the needs to strengthen professional knowledge fields not included in the older research universities. Main challenges within these combined fields are related to increased differentiation and the need for experience-based combination of scientific, scholarly and practical knowledge:

The rationale for the establishment of a new university is primarily a strong need to lift the knowledge base of professional educational programs and other vocationally oriented studies, in order to ameliorate new professional candidates in meeting the challenges from future practices. (...) Professional services demand insight into the complex relation between scientific knowledge and professional practice, and the ability to differentiate between forms of knowledge. When demanding decisions are to be taken, it is important to balance scientific knowledge, personal judgment, and knowledge and preferences among stakeholders. (p. 4)

With broad professional education and qualification as core functions, a particular challenge for the new institution is to balance practical and professional needs for relevance with the search for new knowledge beyond planning and foresight. It is also argued that the task to qualify good professional practitioners should be kept in accordance with the *Bildung* of active citizens:

The university as a place of study and learning will be influenced by tensions between the development of knowledge to contribute to practical tasks, and the search for knowledge concerning new possibilities that will not always be defined or directed in advance. The ambitions have been, and will be, to combine the certification of knowable specialists with the formation ('Bildung') of democratic citizens. (p. 10)

In line with the approach by Tranøy discussed earlier, part of the strategy is to mediate between foci on internal intellectual virtues and on welfare functions. As a consequence, the strategy document relates the understanding of academic freedom to possibilities for constructive as well as for critical intellectual contributions:

Resulting from the scholarly and normative foundations of the university the institution is engaged with the surrounding society through relations of mutual trust. (...) An imperative principle is the right to investigate any theme and the freedom to express scholarly opinions. A basic aspect of academic freedom is furthermore to promote constructive and critical contributions and to express scholarly criticism also including critique against the institution itself. (p. 10)

Furthermore, a focused key tension in the years to come will be the strengthening of PhD programs in an institution that needs to recruit a high number of staff on the basis of combined academic and practical professional merits. This double recruitment strategy is presented as the challenge to keep up the recruitment of experienced

professionals at the same time as the recruitment of staff with a PhD will increase:

A development towards the recognition as full university will meet a number of challenges. Research activities will have to be increased significantly. R&D funding must be utilised more systematically, and funding of research training will need to secure PhD-programs with the necessary robust framework. (...) In the varied professional and practice-oriented programs, it will still be needed to secure relevant working experience as well as teaching experience. This will mean that recruitment of academic staff from professional practice will be kept up at the same time as recruitment relatively directly from doctoral programs will be increasing. (pp. 10–11)

The main aspects of the strategic profile, and the particular knowledge nexus aimed at, could be summarized as follows:

- an explicit focus on questions concerning the societal responsibility as well as epistemic challenges of a new university with professional schools as its core, and
- a focus on needs to balance constructive and critical knowledge questions and welfare contributions.

Academic mainstreaming or deepening of professional knowledge orientations?

Professional and practical knowledge is, based on classic hierarchical research orientations, often seen as a kind of knowledge subordinated to the system of disciplines. But at this point it is instructive to consider how Wittrock and Wagner (1990), in an article on the historical development of the social sciences, emphasise different ideal types of institutional and cognitive development of the social sciences. They use the terms comprehensive social science, the discipline model, and the professional model to distinguish between different knowledge orientations. The ideal types give a framework for historical and comparative analysis, but they are also useful to explore contrasting knowledge profiles and programs for institutions. If we take these three distinctions as a point of departure, major internal and strategic challenges can be noticed due to a gradual softening of the hegemony of knowledge orientations in line with the discipline model.

Parallel with national policies to base funding and reward patterns mainly on academic rather than on combined academic and professional scholarly standards, a softening of binary hierarchies between the university sector and the college sector have been partly accepted within higher education from the 1990s in Norway. As an internal expression of the external policy inconsistencies, an increased division of educational and scholarly tasks during the same years have become more visible. During the same period, within the state colleges a more marked divide can be seen between the large majority of staff engaged with bachelor programs on the one hand and minor groups among the staff engaged primarily with small graduate programs and research centres on the other hand. In this way the earlier external segmentation patterns from the rigid binary system have moved inside the colleges in years when the binary divide has been less strict at the system level.

In this context, and in line with our exploration, some of the key local strategic challenges in the new Oslo and Akershus University of Applied Sciences in the coming years will comprise:

- the establishment of a less vertically divided institution
- challenge tendencies to a monopoly of graduate programs and research priorities for minor groups among the qualified faculty
- creating acceptance for combined academic and professional merits as an alternative to the still far to dominant discipline standards.

These strategic knowledge priorities are also clearly related to a general concern for less narrow forms of meritocracy, and hence, articulate a straightforward 'public concern'. Moreover, broader institutional acceptance for combined academic and professional merits can widen the areas and agendas for interchange between the new institution and its social and cultural surroundings. In this way, a broadened conception of merits can contribute as well to wider democratic challenges in scholarly as well as in public arenas and debates. A knowledge nexus with a main focus on interchanges between the certification of new generations of professional candidates, a R&D profile that emphasises professional domains, and a broad knowledge exchange not least with welfare professions, perhaps offers new opportunities to address public and democratic challenges in knowledge domains beyond the ones that are served by the older and well established Norwegian universities. The current discussion on knowledge profiles and an adequate knowledge nexus thus is at once a discussion on the public role of knowledge, and of the university itself.

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## NOTES

I. In the terms of Basil Bernstein, the Mode 2 thesis analyses the weakening classification of systems of knowledge production, in particular of science and other research institutions. The perspective is extended to an analysis of the co-evolution of knowledge production and society in "Re-Thinking Science" (Nowotny et al., 2001). In this book, weakening of classifications are extended also to cover changes in the more general relations between science and society. The thesis is that "it has become increasingly difficult to establish a clear demarcation and differentiation between science and society" (Nowotny et al., 2001, p. 47).

The merger process that is leading to the Oslo and Akershus
University of Applied Sciences can be followed through an
information web page in Norwegian: http://www.hio-hiak.no
For the strategy document: http://www.hio-hiak.no/
Utredningsarbeid/Utvalg-for-strategi-og-universitetssatsing