

How to apply for a professorship (in Norway)

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Abstract

An employee in an academic position has to do at least three different tasks: research, teaching and research dissemination. In addition come administrative duties. These tasks draw on different skills that all should be documented in an application for an academic position. Unfortunately, only a minority is writing their applications so that their total competence is documented. A good application must be *complete*, *orderly* and *positive*. In the application, the evaluation committee must find answers to their questions. The application should be structured and easy to read. The application should focus on the applicant's expertise and present it in a positive manner. The evaluation committee will generally add twice as much emphasis on teaching experience than administrative experience, and furthermore, twice as much emphasis on scientific qualifications in relation to teaching experience. Scientific qualifications cannot be overruled.

1 Introduction

An employee in an academic position, including a professorship, is intended to do at least three different tasks:

- *Research*: planning, writing grant applications / obtaining funding, do research, implement and communicate the results of their research.
- *Teaching*: planning, administering and teaching in advanced areas.
- *Dissemination*: implementing popularized lectures and presentations, participate in public debates, legitimize and demonstrate the value of research for the society.

In addition, many positions also include administrative tasks.

Each of these tasks requires different knowledge and skills – knowledge and skills that everyone should clarify in an application for such a position. In the “Guide for applicants for professorships at the Faculty of Humanities” at University of Bergen (UiB, 1999b), the evaluation committee is in the ranking of *qualified applicants* asked to weight the dimensions of competence I, II and III as follows:

I.	Scientific merits	4
II.	Teaching experiences	2
III.	Administrative experiences	1

This can also be interpreted as research counts twice as much as teaching, which again counts twice as much as administrative work.

Unfortunately, many people applying for academic positions do not seem to have a clear idea of what tasks one is supposed to do in such a position. This is particularly worrying for professorships, for which the holder should not be in doubt regarding his/her position's work content and obligations. The result is incomplete applications and perhaps even a negative expert evaluation.

This paper presents the procedure of a professor application, reviews general advices and procedures in this process as well as reviews the evaluation committee's working procedures. Finally, the paper also discusses application tactics.

2 Procedure

For job applications in universities and colleges we have to follow a formal procedure consisting of (Hartvigsen, 1998):

1. Formulation of a job description (Norwegian, “betenkning”/“stillingsbetenkning”): states preferred skills and present the administrative process.
2. Call for applicants with deadlines for applying (check what is stated in the job description and/or advertisement):
 - a. The application must be submitted:
 - i. Electronically: UiT uses the service to jobbnorge.no:

“Applications for this job must be submitted in an electronic form at Jobbnorge.no
You must fill in: Standard CV
Please state in your application where you first saw the advertisement for the position!”

“Søknader for denne jobben registreres i et elektronisk skjema på Jobbnorge.no
Du må fylle ut: Standard CV
Vennligst opplys i søknaden hvor du først så jobbutlysningen!”
 - ii. Although the application must be submitted electronically, most of the written material must often be delivered on paper.
 - b. Paper-based: All parts of the application are sent to the institution.
 - c. Applications (4 copies) with CV and certified copies of diplomas and relevant certificates. In the application you must state which of your scientific work that you will submit for assessment.¹
 - d. Scientific papers (3-5 paper copies). All scientific papers must be submitted by the deadline.^{2 3 4}
3. List of applicants is made and an Evaluation Committee (minimum 3 members, 2 external) is appointed.^{5 6} The list of applicants is made available to the applicants.⁷ (Please ask

¹ The following standard text is used by the University of Tromsø: “In addition, the application, including CV, certified copies of diplomas and references, the completed form regarding teaching qualifications and the list of scientific works, must be sent in 4 copies within the closing date for applications, directly to: (relevant faculty/department)

² For application to the national promotion system all publications shall be submitted by the deadline.

³ Previously, it was common that professorships had an extended deadline for submission of scientific papers, often one month after the deadline.

⁴ The University of Tromsø uses two alternatives with respect to the number of scientific papers to be submitted: a) The applicant can submit an “unlimited” number of publications: “THE SCIENTIFIC WORKS – published or unpublished – the applicant wishes to be taken into consideration during the evaluation process must be submitted in 3 copies arranged as 3 complete sets.”; OR b) The applicant may submit a limited number of works: “THE SCIENTIFIC WORKS: Applicants may submit up to 10 scientific works considered central to their production. The Doctoral Degree dissertation is regarded as one work. The scientific works must be submitted in 3 copies arranged as 3 complete sets. In addition, applicants must submit one copy of the other listed scientific works. The applicant shall provide a description of his/her scientific production stating which works he/she considers the most important and shall therefore be the main emphasis of the evaluation. A brief description of the other listed works shall also be included to demonstrate depth of production.”

⁵ Supplementary regulations for appointment to teaching and research positions at the University of Tromsø “indicates that” for the top position, the committee's composition comply with the provisions that apply for promotion to Profes-

for a copy, often the list of applicants is not automatically sent to the you.)⁸ Applicants will be notified about the committee's members. (Institutions often neglect this. If you do not receive information about the appointment of the committee, you should ask for it.)

4. The evaluation committee makes its recommendation. The Committee presents the ranking and gives rationale for its conclusion, or gives a justification for why the applicants were not ranked. (If there are many applicants for the position, the Committee will more likely only rank the first three. It's also possible that these are given a more thorough discussion in the evaluation document.) Committees do their ranking according to the job description. It is somewhat unclear whether the Committee shall: (a) assess the applicants based on their total scientific merits but rank the applicants in accordance to the job description, or (2) relate solely to the job description and only consider those applicants / workers that have their qualifications within the stated areas (in the job description). The latter is the normal variant, in part because the committee is appointed to cover the areas described in the job description. The committee does not take gender into account, but will write their evaluation so that it can be done administratively.
5. The committee's evaluation is sent in its entirety to all the applicants that the committee has considered. Applicants are given the right to comment on the evaluation and the conclusion.⁹
6. The evaluation committee will answer any comments from the applicants.¹⁰ It is extremely rare that comments are accepted, but comments still function well as correctives to the Committee and the academic community.

sor: "The Committee shall consist of at least three members with a professor or equivalent competence in the subject area. Only one member of the committee may be from the University of Tromsø."

⁶ "Guidelines for the evaluation of professor qualifications on appointment and promotion" (recommended by the Norwegian Association of Higher Education Institutions on 25/11/2002) states that: "An evaluation committee should consist of at least three people holding a professor position or equivalent. If one or more of the applicants have expertise from another subject area, interdisciplinary in the evaluation committee should be sought. Only one member of the evaluation committee shall be from the university, and, to the extent possible, the committee shall have one member from another country. The committee shall be represented by both sexes."

⁷ For positions at the University of Tromsø apply: "Personal data given in an application or CV will be processed in accordance with the Act relating to the processing of personal data (the Personal Data Act). In accordance with the Freedom of Information Act, section 25, 2nd paragraph, the applicant may request not to be registered on the public list of applicants. The University may nevertheless decide that the name of the applicant will be made public. The applicant will be notified beforehand in the event of such publication."

⁸ The "Guide for Human Resources consultants" (Norwegian, "Veiledning for personalkonsulenter") at the University of Oslo states: "Employment cases are exempt from the general administrative law provisions on the right to familiarize themselves with documents, see the Public Administration Act § 3 The applicants' right of access provided for in regulations on parties' right of access to documents ("partsoffentlighet") in matters of employment in the public sector. The institutions do not have an active information duty."

⁹ The "Guide for Human Resources Consultants" at the University of Oslo said in Section 1.3.4 "Access to expert evaluation of scientific positions" states that: "When it comes to the evaluation of applicants for academic posts, the Senate adopted the practice of public access ("meroffentlighet"), see § 7 of the Regulations for appointments, respectively professorships and associate professorships: "A copy of the assessment from the experts is sent to the applicants personally before the matter is being considered by the recommending authority." The applicants in this context is required confidentiality similar to those involved in the proceedings (see Section 1.2.4 confidentiality) and should be made aware of this in the cover letter. An applicant pursuant to the Public Administration Act § 13 provided information covered by professional secrecy may only use the information to "safeguard its interests in the matter," i.e., their right to check whether there is an objective assessment."

¹⁰ The "Guide for Human Resources consultants" (Norwegian, "Veiledning for personalkonsulenter") at the University of Oslo states: "A copy of the assessment from the experts is sent to the applicants before the matter is being considered by the recommending authority. If the applicants do not resist it, the expert assessment might be made known to more people. Applicants are allowed to comment on the assessment, and any input will follow the case to the nomination and appointment authority. This does not mean that the applicants have a right to formal appeal against the decision of the appointment, but represents extended access to the document and opportunity to correct any misunder-

7. The nominating body for public sector appointments (“innstillende myndighet”) may call the highest ranked candidates for an interview. The evaluation committee may be delegated nominating authority. But this does not apply to professorial level, where the faculty board is the nominating authority. It may also be appropriate to invite candidates to give a trial lecture. The purpose of this phase is to assess the most qualified applicants' suitability for the position.¹¹
8. The authorized board of directors makes decision on the appointment. The board is in principle free to overrule the expert committee, but it should be very weighty arguments to overrule an expert committee's review.¹²

This entire process can take up to two years. But normally, this process takes less than one year. However, it should be possible to implement this process in 4-6 months, especially since it is often only a limited number of scientific papers the applicants are allowed to submitted for assessment.¹³

3 General principles of application

Although a well-written application not in itself will guarantee that the applicants are found qualified, a thorough and well-organized application could prevent unfair and misleading assessment committee statements. The application shall according to Professor Karl H. Teigen be:¹⁴

- *Complete*: The Committee should in the application be able to find the answers to its questions. (It is very rare that the committee contacts the applicant directly to obtain more information.) The application should highlight the applicant as a strong candidate, professional, educational and administrative. This requires a thorough application.
- *Orderly*: The Committee should easily be able to find its way through the application. An orderly application will easily be able to draw a picture of a competent applicant.
- *Positive*: the application should focus on the applicant's competence – and not incompetence. It is important that the picture drawn is balanced (neither “exceptionally well qualified” nor “unsure and hesitant”).

It happens all too often that the applications are incomplete. This is true along most axes, including the submission of work, commenting on their work, discussion of professional ambitions, visions, etc.

standings. The recommending authority (“Instillingsorganet”) (or the body's chairman) will determine whether any comments should be sent to the evaluation committee for review. Deadline for submission of comments from applicants will normally be about 14 days. An applicant is not entitled to have their comments submitted to the experts.”

¹¹ The “Guide for Human Resources consultants” (Norwegian, “Veiledning for personalkonsulenter”) at the University of Oslo states: “The University Act's requirements for a special expert evaluation is primarily based on the need for an independent quality assurance, while it is meant to emphasize professional autonomy as a fundamental element of research and teaching. The expert assessment is thus an important part of setting the foundation, but the formal recommending authority still has the final responsibility and authority in relation to the ranking of candidates. The recommending authority is also responsible for interviewing, assessing applicants' personal suitability and decides whether to hold a trial lecture or other tests.”

¹² The “Guide for Human Resources consultants” (Norwegian, “Veiledning for personalkonsulenter”) at the University of Oslo said in Section 1.3.4 “Access to expert evaluation of scientific positions” that: “The recommendation to faculty positions should also review personal suitability for the position. To make this assessment is the recommending authority's task - and not the evaluation committee. This part of the recommendation is subject to the same provisions of the parties' right of access to documents (“partsoffentlighet”) as for a technical-administrative position.”

¹³ “Guidelines for the evaluation of professor qualifications on appointment and promotion” (recommended by the Norwegian Association of Higher Education Institutions on 25/11/2002) states that: “The expert assessment shall normally be submitted within 3 months after the experts have received the papers that are the basis for assessment.” For professorships, University of Oslo has a 5-month deadline.

¹⁴ From Professor K.H. Teigen's talks: “The application: general principles”, Skibotn field station, Skibotn, Troms, 29 September 2000. (Teigen is professor of psychology at the University of Oslo.) (In Norwegian)

Remember that one should document both the administrative, educational and research capabilities, in which the latter is most important, and that the majority of the committee will not in advance have knowledge of one's merits.

3.1 Perspectives

It is, according to Teigen¹⁵, useful to switch between different perspectives. Applicants should in the application pay attention to:

- Him/herself (the applicant itself)
- The Evaluation Committee
- Any other applicants

Teigen recommend the applicant to try to imagine that he/she is writing about a good friend that he/she wants to present in a positive way. It is often easier to give a positive presentation of oneself when one takes this perspective and try to see oneself in third person.

The applicant should also try to imagine that he/she is a member of the evaluation committee. Think especially on how one can simplify the committee's work: write clearly, highlight key factors – what your work is about and how your work (i.e., publications) can be grouped. The latter is particularly important since the committee, especially for full professor positions, are counting the number of possible doctoral degrees the applicant's work represents. Formulate sentences that can be pasted into the committee's statement, but let there also be room for the committee's own formulations. Please note that the committee may/will comment on your publications individually and in groups.

You must also show how your profile is relevant to the position and state your professional goals – the research goals you have for the position. *Applicants should (read: must) develop a plan for their professional work in the future.* The point is to write yourself into the job description (“stillingsbetenkingen”), and reveal to the committee the professional goals you have for the coming year. Although the job description (“stillingsbetenkingen”) often does not explicitly specify this, such a plan is considered as mandatory. This is a professional management position! The application must also reflect this.

The guidelines for the evaluation committees at the Faculty of Humanities, University of Bergen (UiB, 1999b), recommend that the applicant should provide:

“... a short presentation of their scientific careers and activities, with particular emphasis on the (up to 15) selected publications. The parts of the scientific production that are most relevant to the position according to the announcement and job description, should be discussed in more detail with emphasis on originality and innovation. This presentation is limited to 2 pages.”¹⁶

Finally, the applicant should offer some thoughts on any other applicants. Be sure to include the elements that it is likely that other applicants include in their applications. Highlight particular strengths you might have.

3.2 Before the application is written

A good application requires weeks of work. Some of this effort can be made well in advance if one recognizes that the goal is to try to get a professorship, or another academic position, and consciously work toward that goal. This means that all relevant aspects continuously must be documented and archived. A complete CV and copy-friendly copies and/or digital copies of all aca-

¹⁵ See footnote 14.

¹⁶ This description has later been elaborated in “Guidelines for evaluation of applicants for professorships and national professorial promotion”. However, I think that the old description is more to the point. <https://www.uib.no/filearchive/engelsk-bedomming-professoropprykk-2009.pdf> (Accessed: 5.12.2010)

demographic work / publications are a good starting point for a successful application. (See, for example (Hartvigsen, 1998).)

If you have no such information available at the start of application writing you must make sure to give yourself sufficient time to obtain the necessary information, including a list of positions, research visits, research projects, etc.

Before work on the application starts, it is important to carefully read the job description (“stillingsbetenknningen”): what kind of research areas are specified in the job description / what kind of competence is wanted, what is important (according to the job description), what is the deadline for the submission of publications, how many copies shall be delivered (for the part of the application that (eventually) shall be submitted on paper), how many publications can be submitted, etc. The committee should be able to easily identify the requirements from the job description in the submitted application.

Then you should continue to the list of publications. Give an overview of all publications in chronological order. The publications should be systematized in publications published in journals, books, conferences proceedings, reports, etc. Please also include publications “In press” and “Submitted”. Preferred publication channels may vary from field to field. In some fields, there are conferences that are considered as important as journals!¹⁷

3.3 The written application

When it comes to the written application, Teigen¹⁸ recommends that one should switch between text and lists. The text will provide summary and positive descriptions of efforts in various areas. The application is personal – there is no reason to hide this fact, so use “I” in the application.

Teigen¹⁹ recommends that you use characteristics that seem explicit, but it is flattering, such as “extensive experience”, “comprehensive investigation”, “significant efforts”, “all-round business”, “broad background”. You should not use terms like “brilliant”, “extraordinary”, “outstanding”. These should be handed over to the committee. Teigen also states that if one thinks this is too positive, you can moderate the discussion by using “pretty”, “relative” or “fairly”. Note that you do not describe yourself, just what you have done or have been through.

The guide for applicants for the professorship at the Faculty of Humanities, University of Bergen (UiB, 1999a), recommends that the application should be organized according to the following factors:

“Organize your application in sections: personal details, education, work experience, academic activities [also include professional ambitions / professional future plans], supervision, teaching experience, popular science activities, administrative experience, and a short description of the scientific production (see section 4). Applicant's family name should be inserted in the upper left corner of all pages in the application, which also are paginated.

The publications should be listed chronologically with the number of pages and any co-authors. The application should be ordered in the following groups:

- a. *Theses, monographs*

¹⁷ Within, e.g., research on operating systems the conference “The ACM Symposium on Operating Systems Principles” (SOSP) hangs on par with (or for some higher) than journals in the same area. The conference, held every second year, claimed before the submissions could be done electronically (i.e., before 1997) that you have to submit 15 copies to the referee process. Proceeding is available from ACM Press and in electronic form. The best papers will also be forwarded to the journal ACM Transactions on Computer Systems.

¹⁸ See footnote 14.

¹⁹ See footnote 14.

- b. *Publications in refereed scientific journals*
- c. *Published books / book chapters*
- d. *Publications in scientific journals without referee*
- e. *Published overview presentations (review articles, summaries, extracts, etc.)*
- f. *Research Reports in for example internal report series*
- g. *Published popular science presentations, teaching compendia and unpublished reports*
- h. *Presentations of others' work (assessments, reviews, etc.)*
- i. *Other written production*

*The applicant must clearly mark the scientific works (up to 15) that are considered most significant. A **separate list** should be attached. The evaluation committee will scrutinize this work very carefully. The doctoral thesis is in this context seen as one scientific work, even if it consists of several related work."*

Section 2 will vary depending on the field. In technology, it is far more common to publish in conference proceedings. In other fields, proceedings from conferences are not published (archivable).

3.4 Scientific qualifications

In essence, the evaluation of the qualification as professor is a counting of doctoral degrees. Some fields, such as humanities and social sciences require two doctoral degrees, while others, such as psychology, medicine and most sciences, require (up to) three doctoral degrees. (It must be added here that the scope for doctoral degrees vary from field to field.)

Teigen²⁰ recommends that in order to facilitate the work of the committee you should **split the scientific production into groups of 3-5** (assuming that the competency requirement is three doctoral degrees):

- *Group 1: Doctoral thesis:* This group consists of the doctoral dissertation as well as any preparatory work and publications based directly on the dissertation.
- *Group 2: Continuation of dissertation work:* work that represents a "continuation" of the themes from the doctoral dissertation. It is important to stress that this is a separate group and not just "more of the same".
- *Group 3 (+ 4): Other thematic areas:* Thematic or methodologically different works (from group 1 and 2). This documents the breadth of the works. In addition, this shows the ability to independently initiate and carry out research.
- *Group 5: Miscellaneous work:* This is perhaps educational work, book chapters for a wider audience, and the like. This group can be used to document the educational efforts and/or width.

Describe the red line in each group, with emphasis on how the groups are different from each other. Describe what you believe is the most important result(s) / message of the research (each group separately).

The point is obviously to facilitate the work of the committee so that they can see that production is at least equal to the number of doctoral degrees that are needed, within the applicant's spe-

²⁰ Se fotnote 14.

cially. It is easier to let the evaluation committee to merge groups (e.g., 3 and 4) than to entrust them to split groups (e.g., 1 and 2).

Note that the evaluation committee is particularly concerned about:

- *Breadth*: The breadth in the publication portfolio must be sufficient (cf. Group 1-5).
- *Volume*: Sufficient volume of international publications (journals and conferences with proceedings).
- *Journal papers*: Even if the importance of journal articles may vary between different fields, you will only exceptionally be granted competence without a certain number of publications in international journals.
- *Personal statement*: The enclosed publications are discussed in terms of originality and research contributions.

A missing piece in many applications, and a piece that the evaluation committee will eventually have to react harder on, is the requirement that any co-authors must explain their contributions to joint publications.

3.5 Administrative experience

As part of the duties of an employee in the academic position is administrative in nature, and administrative experience is one of the pillars of competence, it is important that such expertise and experience are documented in the application, including:

- Management (appointments at a university, faculty, department or other administrative positions)
- Education (curricula, seminars, research courses, etc.)
- Research (the planning of procurement, arrangement of conferences, etc.).

The experience can be from research group, office of the Department (e.g., Head of department), faculty (e.g., adjudication committees), at the national level (e.g., research council) or international level (management of international research projects).

3.6 Pedagogical qualifications

It is important to document pedagogical qualifications. By equality of publication quantity/quality educational experience may be the success factor. What specifically should be documented are:

- Teaching experience (in summary)
- Sensor activities (external examiner)
- Supervision, especially of doctoral students
- The design of textbooks and educational materials
- Curriculum work
- Educational courses

In some fields successful supervision of doctoral students is required to be qualified as a professor.

At the University of Tromsø the following standard text for advertised professorships is used:

“Further, applicants must be able to document teaching qualifications in the form of university-level teaching seminars, other teaching education or through having collected a teaching portfolio. In special circumstances, documented practical teaching skills may also be assessed equally.

Teaching portfolio, cf.: <http://uit.no/iplu/6637/13> ”

Furthermore, the announcement will include:

“Applicants shall also complete and submit the form regarding teaching qualifications, uit.no/poa/vitenskapelige-stillinger”

3.7 Other factors

Depending on the job description and the applicant's qualifications it may also be other factors that deserve a separate paragraph in the application.

3.8 Selected publications

It has in recent years become common to limit the number of publications permitted submitted, preferably 10 or 15, depending on the field.²¹ The publications that are selected should show breadth of research as well as the latest research. The scientific contributions of each publication should be comment in a separate annex to the application. If there is no restriction in the number of publications that can be submitted, you should submit all publications you believe represent a contribution to research. (I.e., all publications that is meritorious!)

If you have to limit yourself to 10-15 publications, it is still possible in the application to comment on works that have not been submitted to the evaluation committee. By making copies of works that are not submitted accessible via a web page you can easily circumvent the capacity constraint. The Committee may then decide to access the additional publications, which sometimes can be useful if the qualification assessment is not undeniable.

Although it gives a bad impression if the master thesis is not accompanied by an application to the college lecturer position, then it is not certain that it should be enclosed in a professorship application. This will depend on the field. In some field it is not given that the doctoral dissertation should be submitted for evaluation. (This also depends a bit on how long ago the doctoral degree was awarded.) Viewed from the evaluation committee's hand, for most applicants it is an advantage that the doctoral dissertation is attached. If the committee does not have access to the doctoral dissertation, it will usually assume that all works written during the work on a doctorate and the next 1-2 years is related to the dissertation.

4 The work of the evaluation committee

The Evaluation Committee will, in addition to the application with attachments and submitted publications, base its work on the job description and position announcement and the rules for evaluation committees that each institution may have, both internal rules and circulars from the Ministry.

Academic qualifications are important, and pursuant to the circular F-14-95 from Ministry is not waived: "The guidelines will be waived on certain points when it has registered applicant who has special qualifications for the position. Academic qualification cannot be waived."

The "Guidelines for evaluation committees for professorships at the Faculty of Humanities, University of Bergen" states that:

"The application must be accompanied by a complete list of the applicant's academic work. The applicant shall him/herself point out the publications (up to 15) that he/she considered most important. All appointed work must be among those submitted for evaluation. The evaluation committee has the opportunity to do a particularly thorough review of these selected works. The rest of the production can also be considered, especially to find out whether the applicant's research has the necessary breadth."

²¹ The information on this can be found in the job announcement / description. At the University of Tromsø, it is up to each department / faculty to decide whether one wishes that all publications must be submitted or "up to 10 publications". Note also that the text says: "THE SCIENTIFIC WORKS – published or unpublished – the applicant wishes to be taken into consideration during the evaluation process ...". Also unpublished works can be submitted. (But it is hardly wise to submit works that are unpublished because they have been heavily criticized in the review process.)

The same guidelines says about the requirements for professorial qualifications that:

“To conclude that someone is qualified as professor the selected works must be on a high scientific level (i.e., give an original contribution and clearly be recognized as being in the research frontier in their fields). The publications should be published in internationally recognized journals or clearly be of a quality equal to such publication and distribution. When larger theses (i.e., books) are published, they should be published by scientific publishing houses with review of the manuscript.

To achieve competence in a specific subject area (indicated in the advertisement and job description), the applicant must fulfil the general requirements for the scientific study of the above in this field. If the applicant has significant scientific production, which is adjacent to the designated area and master scientific methods that can be clearly applied in this, the requirement for production within the specific area is lowered somewhat.

Completed doctoral examination within the advertised area is normally a requirement for a professor.”

Circular F-14-95 indicates that the basis for qualification to an associate professor position includes: “Norwegian doctorate in appropriate discipline or equivalent foreign doctoral degree recognized as equivalent to a Norwegian doctoral degree or qualification of an equivalent level documented by academic work of the same scope and quality.” This means that it still is possible to have awarded doctoral qualifications, and later a professor on the basis of published work only.

This appears also in the “Guidelines for the evaluation of professor on appointment and promotion” from 2002²², where a point about “validation” (“realkompetanse”) has been included:

“Applicants with documented qualifications, but who have not qualified themselves through organized research and/or completed a PhD, should have the opportunity to apply and to be considered for professorship. In assessing the qualifications one should seek to fulfil requirements for scientific or artistic production equivalent to a Norwegian doctoral degree (published during the past five years within the relevant subject area) and documented the breadth and independence in research activities.”

It has also become possible to consider “other forms of documentation”:

“The normal would be that scientific qualifications will be documented through traditional academic work through the mainstream scientific media, but it will also open for other forms of documentation, including problem solving across discipline boundaries, ‘new forms of documentation’, and that non-published material may count in the assessment. The documentation may also include other exercise that clearly shows that the applicant must have high scientific competence.”

Guidelines from the University of Bergen says further about the breadth requirement that:

“In addition to showing the ability to specialize, the applicant must have demonstrated academic breadth. How wide can be documented in that part of the applicant's production that falls outside the selected works.”

This breadth requirement is often a difficult obstacle, and may lead to that the applicant can only be judged competent in a qualifying position. The guidelines state further that:

²² “Guidelines for the evaluation of professor qualifications on appointment and promotion” (recommended by the Norwegian Association of Higher Education Institutions on 25/11/2002).

“It should be demonstrated a scientific effort with quality and volume that roughly corresponds to two doctoral dissertations in fields relevant to the advertised position in order to find the applicant qualified as a professor.”

As previously stated professor qualification requirements will vary depending on disciplines, from 2 to 3 doctorates. There are also those who argue that the requirement is three doctoral degrees in addition to the regular doctoral degree.

It is also important to be aware of the rules for authorship. The UiB guidelines say that:

“Single authorship or first authorship should generally count more than secondary authorship. In the “Guide for applicants” the applicants are requested to specify what their responsibility in any joint publications has been.

In addition to assessing the overall scientific production (with special emphasis on the selected works), the emphasis is on the applicant's research over the last 5-10 years.

Guidelines for ranking of more qualified applicants: There will be special emphasis on the applicants' scientific originality, ability to absorb new methods and problems, and research activity in the last 5-10 years.”

In addition to scientific publications, emphasis is also placed on the ability to create research groups. The UiB guidelines state that:

“There should be no doubt about the applicant's ability to be supervisor for doctoral candidates in the announced field. If the applicant has had a chance to be supervisor, this should be documented through previous successful supervision of doctoral candidates. If the applicant has been co-supervisor, it should be documented that the supervisory function has been central and important for the candidate. This documentation should be in the form of declarations from co-supervisors.”

About the ranking of applicants, the UiB guidelines state that:

“Proven ability to build up a research group and perform supervision (at the doctoral level, or postdoc-level) should be substantially meritorious. Cooperation with other groups also counts positively in the ranking of qualified applicants. The applicants' ability to get international contacts within their field are given weight, even when this has occurred in the form of secondary employment in major prestigious research groups. Ability to organize interdisciplinary/multidisciplinary contacts domestic and abroad also added weight. (...)

Documented and good popular science should be positively meritorious. The popular science activities will be documented by speeches or through publications.”

About educational qualifications, which is the other qualification criteria, the UiB guidelines state that:

“The applicant should have teaching experience in the subject area. Teaching experience in a related field or extensive general teaching experience may be accepted if it is clear that the applicant has the necessary professional knowledge to teach in the field specified in the advertisement / job description. There should be no doubt that the applicant can teach at any level in the field.”

The third competence criterion is administrative experience. UiB guidelines say that:

“In the assessment of applicants administrative experience and expertise of different kinds shall also be weighted. Among the important factors that should be emphasized here is participation in councils, committees dealing with research and education on institute/faculty level, or collegium level, research involvement, management of research projects, etc.

There should be no doubt about the applicant's ability to cope with the administrative duties that accrue to a professorship at the Faculty of humanities.”

In some cases there may be special circumstances that requires a somewhat different assessment of the applicant. The UiB guidelines states that:

“The guidelines given above should cover the vast majority of reviews of professorships. In some exceptional cases it may be necessary to deviate from or supplement the requirements stated above to ensure that particularly unusual capabilities or talents are not denied knowledge on formal grounds when it clearly would be unreasonable.

If the evaluation committee wishes to waive the requirement of holding a doctoral degree, it must be justified by the applicant to have unusual valuable technical properties or certainly would have been awarded a PhD on documented scientific work.

It is easier to waive this requirement if the field does not have an established academic tradition.”

About the assessment, the UiB guidelines state that:

“In the overall assessment the emphasis should be placed on academic qualifications as an unconditional requirement. The fact that an applicant has special expertise in teaching or administrative work does not reduce the level of required scientific expertise. In the ranking of applicants who are almost the same with regard to scientific activities, the other qualifications are decisive.

When the announcement / job description does not contain specific requirements, an applicant with high teaching experience should be ranked ahead of an applicant with marginal experience. Teaching experience beyond the announced field is taken into consideration, because the applicant after employment may be forced to teach outside the organizational unit position is affiliated with.”

As mentioned in the introduction, UiB has indicated the following weighting of expertise (in the humanities):

“In the ranking of qualified applicants the committee should weight the dimensions of competence I, II and III as follows:

<i>I. Academic qualifications</i>	<i>4</i>
<i>II. Teaching experience</i>	<i>2</i>
<i>III. Administrative experience</i>	<i>1</i>

Competence Dimension IV [special conditions] is considered discretionary for each position.”

In science and technology we will most likely find a fourth dimension – *international experience* – with the weight as for administrative experience. (Note that the weighting applies to applicants who meet the qualification requirements, i.e., after the minimum scientific requirement is reached.) In addition, academic qualifications will have a greater weighting. This gives:

<i>I. Academic qualifications</i>	5
<i>II. Teaching experience</i>	2
<i>III. Administrative experience</i>	1
<i>IV. International experience</i>	1

The guidelines give the following advice with regard to the overall assessment and ranking:

“To make the assessment more manageable analytically, it is proposed that the assessment splits the relevant dimensions into the following basic components and that these form the basis for the discussion of the individual applicant:

I. Academic qualifications

(a) Originality and quality, (b) productivity, (c) breadth, (d) front-orientation, (e) working environmental building, (e) popular science

II. Educational qualifications

(a) Basic teaching training, (b) evaluation reports, (c) teaching, supervision and examination work, (d) own educational publications, lecture notes, teaching materials, (e) research and development, (f) received student awards

III. Administrative experience

(a) Relevance/responsibility, (b) scope, (c) documentation”

For science we have:

IV. International experience

(a) Initiation of international research project (research management), (b) participation in international research projects, (c) research stay abroad of longer duration, (d) invited international scientists

Note that "front-orientation" (in Section I) includes a statement of academic plans and ambitions.

4.1 Snapshots from evaluation committees' work

Evaluation committees' reports can be very different, both in terms of scope and design. Table 1 shows an example of the assessment of an applicant.

For publication the committee can also include factors such as:

- Number of publications per year: $65 / 24 = 2.7$
- Total number of citations: 4376 (182 per year)
- The highest number of citations to a specific paper: 1487
- The highest "impact factor" (of a publication channel): 18.6

Such a listing provides a quick picture of the applicants' relative importance within their own field.

5 Application tactics

If possible, most people will try to avoid losing (a competition). We only counts the victories. For an academic job application, this may have various effects, mainly in the form of withdrawn applications. Some prefer to withdraw the application when they see the list of applicants due to fear of being ranked behind some of the other applicants. Some prefer to withdraw the application when they see the evaluation committee, perhaps to avoid confrontations with professional opponents. Although officially it should not happen that personal relationships should be able to influence the assessment, it can, for example, be that the applicant and the committee interpret scientific results in different ways. We also experience that applicants withdraw their ap-

plications based on leaks from the committee. We find these forms of competition mentality first and foremost in the most competitive academic groups and fields, and they might appear to be quite unreal to other communities.

Applicants who are unsure of their qualifications may also apply for positions elsewhere to get and evaluation. Or they seek promotion by applying to the national committee in their own field, which annually handles applications from all over the country. The advantage of this is that applicant can get reviewed all of his/her qualifications, not only within a narrow field as might be the case if the qualifications are evaluated base on a narrow job description. The disadvantage is that the expertise must be granted without a doubt, something that is not necessary when internal committees perform the evaluation.

Table 1 Example of discussion of each applicants.

<p>Review and assessment of Ola Nordmann (born 1960)</p> <p>Education and academic degrees Nordmann holds a PhD in ... (1998) (certified copy enclosed). Dissertation title: "The dissertation title" (Dissertation is enclosed). Nordmann is furthermore MSc in ... from ... (1990). Main grade was</p> <p>Professional experience Nordmann has much of his career from research. He has been employed in ... from ... Since 2002, Nordmann ...</p> <p>Academic qualifications Nordmanns field of expertise is ... Nordmann has since 1991 authored/co-authored several publications. The numbers in brackets indicate publications beyond those submitted for special consideration</p> <table border="1"> <thead> <tr> <th rowspan="2">Publication channel</th> <th colspan="2">Number of publications</th> <th colspan="4">Number of authors</th> <th rowspan="2">First-author</th> <th rowspan="2">Notes</th> </tr> <tr> <th>Published</th> <th>Submitted</th> <th>1</th> <th>2</th> <th>3</th> <th>4+</th> </tr> </thead> <tbody> <tr> <td>Journals</td> <td>6</td> <td></td> <td>3</td> <td>2</td> <td></td> <td>1</td> <td>4</td> <td></td> </tr> <tr> <td>Int Conf with proc</td> <td>2(+7)</td> <td>(1)</td> <td>(1)</td> <td>(3)</td> <td>1(+1)</td> <td>1(+3)</td> <td>0(+4)</td> <td></td> </tr> <tr> <td>Norw Conf with proc</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Books</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Book chapters</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Reports</td> <td>2 (+6)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>Others</td> <td>(7)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Nordmann has submitted 10 publications for further evaluation:</p> <ol style="list-style-type: none"> 1. "Title of publication 1". Short evaluation of the publication. 2. ... <p>Overall evaluation of submitted publications ...</p>									Publication channel	Number of publications		Number of authors				First-author	Notes	Published	Submitted	1	2	3	4+	Journals	6		3	2		1	4		Int Conf with proc	2(+7)	(1)	(1)	(3)	1(+1)	1(+3)	0(+4)		Norw Conf with proc									Books									Book chapters									Reports	2 (+6)						1		Others	(7)							
Publication channel	Number of publications		Number of authors				First-author	Notes																																																																														
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<p>Project acquisition</p> <p>Pedagogic qualifications <i>Pedagogic education:</i> <i>Teaching:</i> <i>Supervision:</i> <i>Exam grading:</i> <i>Planning:</i> <i>Evaluation tasks:</i> <i>Development of curriculum:</i> <i>Development of teaching materials::</i></p> <p>Dissemination and networking</p> <p>Referee</p>				<p>International experiences</p> <p>Professional work</p> <p>Creation of climate for research and entrepreneurship</p> <p>Administrative experience</p> <p>Relation to the job description</p> <p>Conclusion Nordmann has been an active researcher ... Nordmann has been a supervisor ... Nordmann has been teaching ... Nordmann has initiated and managed research projects ... Nordmann is found qualified as ...</p>																																																																																		

All applicants should keep in mind that it is the last 5-10 years that are particularly interesting for the evaluation committee. It is also important to clarify the progression and quality. Among the publications that are enclosed it should be one that presents the “latest news”, e.g., a work that is “Submitted”.

Also employers may act strategically. By narrowing the job description and direct it towards qualifications of specific candidates, the employer can ensure that their candidate is offered the position. If a younger applicant is preferred, a greater emphasis may be put on the applicant’s potential for excellence in research. If an older applicant is wanted, emphasized will be on experience. Employers can also control the outcome somewhat in the composition of the evaluation committee. Should all these actions fail the employer may choose to ignore the evaluation committee’s ranking and offer the position to the one the employer believes is best qualified. Unfortunately, there are several examples of what at least can be interpreted as interference from the academic community in the appointment process.

Within some research communities, professorships won through competition with other applicants are ranked higher than the promotion professorships. It may also be a hierarchy among institutions, in which some institutions are considered more prestigious than others.

6 Concluding remarks

This paper has addressed the application principles for (full) professorships, but most of the paper is also relevant for applications to lower academic positions. Professorship qualifications can be achieved through application, either to position advertised at their own institutions or through positive evaluation at other institutions or by positive evaluations by national promotion committees. Since all who is qualified to become a professor can get a personal promotion to professor, it is in principle only the applicant himself/herself who stands in the way of a professor title.

According to the University Act (in Norway), everyone who has held a professorship in more than 10 years have the right to call himself/herself professor, even if they quit the job. What is not as clear is that a competency assessment has a limited “life”. According to the Education and Research Ministry’s circular F-15-02 “personal advancement to professor according to competence”, a professorship evaluation has a “durability” of 6 years. After this, a professor must submit himself/herself for re-assessment if seeking a different position. People who have been awarded the expertise of an adjunct professor position (“professor 2”) must still pass another assessment if they are seeking a full professorship.²³

We have in recent years also seen that more and more communities have adopted national policies for the professorship requirements. The Ministry also recommend that such criteria be discussed in relevant professional forums such as national faculty meetings and advisory board.

There is also some literature that can be helpful in career planning and writing applications (for example, Hartvigsen, 1998; McCabe & McCabe, 2000; Melko, 1998; Reis, 1997). Most are adapted to American conditions, but they still have a certain relevance to our domestic requirements.

²³ The “Guidelines for the evaluation of professor qualifications on appointment and promotion” (recommended by the Norwegian Association of Higher Education Institutions on 25/11/2002) indicates that there may be additional regulations that do not require re-evaluation of adjunct professor for appointment to professor positions: “Other guidelines relating to the evaluation of professors can be designed specific to particular disciplines, and is governed by detailed regulations. This could deal with specific details of the documentation basis for scientific and/or artistic quality (scope, identification of the contribution share of joint publications, publication, forums, etc.) and whether it would undertake a reassessment of the relationship between Professor I and Professor II positions. Associate professor or ‘dosent’ who have achieved competence statement as adjunct professorship or former ‘dosent’ position, and who are seeking promotion, shall undergo a new assessment (see Circular F 15-02 ‘Personal promotion according to competence’).”

Acknowledgement

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7 References

- Hartvigsen, G. (1998). *Forskerhåndboken*. (“The researcher’s handbook”). Kristiansand: Høgskoleforlaget. (In Norwegian)
- McCabe, L.L., McCabe, E.R.B. (2000). *How to succeed in academics*. San Diego: Academic Press.
- Melko, M. (1998). *A Professor’s work*. Lanham, Maryland: University Press of America.
- Reis, R.M. (1997). *Tomorrow’s professor: preparing for academic careers in science*. New York: IEEE Press.
- UHR (2002). Veiledende retningslinjer for vurdering av professorkompetanse ved tilsetting og opprykk. (“Guidelines for the evaluation of professor qualifications on appointment and promotion”), Recommended by the Norwegian Association of Higher Education Institutions 25.11.2002. Norwegian Association of Higher Education Institutions.
- UiB (1999a). Veiledning for bedømmelseskomiteer til professorater (HF, UiB)²⁴
- UiB (1999b). Veiledning for søkere til professorat ved det historisk-filosofiske fakultet. (HF, UiB)²⁵

²⁴ <http://www.hf.uib.no/i/sekretariatet/Forskrifter/prof-komite.html> (Accessed: 7. Dec. 2010)

²⁵ <http://www.hf.uib.no/i/sekretariatet/Forskrifter/prof-sokere.html> (Accessed: 7. Dec. 2010)