

Teacher Development Program for assistant professors at ITU

A proposal (April 11th, 2014)

Executive summary

This document presents our proposal of a new Teacher Development Program for assistant professors at ITU, reports on the deliberations behind, and explains the context of the proposal. Our proposal is centered around a **system of modules destined to encourage reflection about the teaching practices of the assistant professors**. It is mostly based on **hands-on reflective work and dialogue** of the assistant professors with their mentors and supervisors; there are **also a number of mandatory courses**. Our proposal requires the collaboration of substantial numbers of staff at ITU.

Contents

1. Introduction.....	2
1.1. Background and commission.....	3
1.2. Legal fundamentals in Denmark.....	3
2. Teacher Development Programs for assistant professors at Danish Universities.....	3
3. The current ITU Assistant Professor Teaching Development Program outsourced to CBS.....	5
3.1. Reflections on the current program.....	5
4. A New Assistant Professors Teacher Development Program for ITU	6
4.1. Modules.....	7
4.2. Progression.....	11
4.3. Portfolio	12
4.4. Challenges	13
4.5. Credit/merit.....	14
4.6. "Start package".....	14
5. Considerations about implementation.....	15
5.1. Staffing & recruiting.....	15
5.2. Resources - in-house/out sourcing	16
5.2.1. The fee of Assistant Professors Program at other DK universities – out-sourcing.....	17
5.3. Internal use of modules.....	18
5.4. External use of modules.....	18
5.5. Evaluation of New Assistant Professors Teacher Development Program	19
5.6. Digital platform for knowledge sharing, portfolio and administration.....	19
6. A final note about general work practice methods for young faculty	19
References.....	20

Appendices.....	20
-----------------	----

1. Introduction

This report is the work of a group of ITU faculty (Emilie Møllenbach, Claus Brabrand, Anker Helms Jørgensen and Susana Tosca) and ITU Deputy Head of Research and Learning Support Annelise Agertoft (from now on "the working group"), who were appointed with the task of proposing an alternative to the current ITU Teacher Development Program, which is outsourced to CBS at the moment.

The working group received the commission in February, 2014, and has held 6 two-hour meetings apart from the individual preparation and writing-up work. The group has worked in an iterative manner, that is, topics have been prepared in collaboration, brainstormed, described and re-worked in several iterations. Some of the topics considered in our investigation include:

- The current Teacher Development Program at CBS/ITU
- The Programs at the other Danish universities
- Scientific literature about university teaching and pedagogy
- ITUs educational strategy (research based teaching, student centered learning, and IT)
- ITUs Education quality assurance policy
- ITUs pedagogical principles: Constructive alignment
- The commission's emphasis on ongoing pedagogical development of *all* faculty

The motivation of the working group has been to propose a solution that both covers the needs expressed in our commission and also contributes to support the ambition of ITUs educational strategy. We intend to involve senior faculty in the pedagogical training of junior faculty. In this light, the solution proposed here should not be seen in isolation but as an opportunity to encourage a working culture where teaching is prioritized by all faculty and given the same kind of serious consideration that they use for their research work.

A *motto* for our work in this project could be "Professional Educational Development through Challenge, Satisfaction, and Joy", as we all have used our love of teaching as a strong motivation in the process and hope to have constructively articulated our commitment to teaching and to learning to teach.

1.1. Background and commission

The working group received the following commission from ITU Department Management:

1. To find a replacement of the current Teacher Development Program (at CBS)
 - a. To identify learning goals for the Program.
 - b. To take the following factors into account:
 - i. That the proposed solution, besides covering basic pedagogical training for junior faculty, can also be used for ongoing pedagogical development of all faculty.
 - ii. That the proposed solution also considers other relevant topics; e.g. general work practice methods for young faculty etc.
2. To compare cost as well as other pros/cons of in-house development and outsourcing solutions
3. To hand-in their proposal by the 11th April, 2014.

1.2. Legal fundamentals in Denmark

In Denmark a ministerial circular (Cirkulære, 2007) concerning job structure for academics make pedagogical continuing education compulsory for assistant professors. The circular does not go into particulars of content or volume.

2. Teacher Development Programs for assistant professors at Danish Universities

We have thoroughly examined the programs for assistant professors of all Danish Universities, here is an overview of the differences in different areas (greyed out columns indicate that all universities agree on the item).

Overview of Teaching Development Programs for assistant professors at the Danish Universities, 2014

	hours	course about learning theories	teaching and feedback methods	courseplanning	local framework for teaching	teaching and career	project supervision	thesis supervision	exam	electives	observation and supervision	collegial supervision	reflection hand-ins or papers	IT learning support	ILO for APG	Language for courses and brochures	Teaching portfolio
ITU/CBS	175	+	+	?	+	+		+	+	+	+	-	+	-		Eng / DK	+
DTU	250	+	+	+	-	-		-	-	+	-		+	-	+	Eng / Eng	+
KU IND	325	+	+	+	-	-		-	+	+	+		+	+	+	DK & Eng / Eng	+
RUC	220	+	+	+	-	-	+	-	-	+	-	+	-	+	+	DK (& Eng) / DK	+
SDU	275	+	+	?	-	-	-	-	-	-	+	+	+	+	+	DK & Eng / DK	+
Århus	150	+	+	+	+	-	+	?	-	-	+	-	-	+	+	?? / DK	+
Aalborg	300	+	+	+	-	-	+	?	-	-	+	+	+	+	+	?? / Eng	+

Despite somewhat big differences in the amount of working hours for assistant professors to complete the programs, there seems to be a similar double structure of **coursework** (organized in a few different modules, often 4) and the building of a teaching **portfolio** (with different requirements as to methods, size and help). Most programs also integrate these two activities with some kind of **mentorship** program, where new faculty get advice from more experienced teachers.

Coursework. There are substantial differences in the nature of the courses that the assistant professors are required to attend. Some universities have more **general courses** about pedagogic principles in relation to university teaching while others seem to offer much more "**applied**" practical courses (for instance how to supervise projects in our study line / diversity among students). There is generally no information about the courses ending in any kind of written work, attending seems to be enough. Also, most universities have specific courses/modules about teaching with IT.

Internat/residential course. This format is very popular. The Programs start by getting people together at a location away from the University as a way to encourage team-building and the establishment of a network of people in a similar situation that can help each other.

Portfolio. Most of the documents examined don't really specify how the portfolio part works. This can be due to the materials being only information brochures in some cases, but there seems to be some indeterminacy as to how this part of the education happens exactly. It seems to us that here is where one could do more practical "exercises" of building up a teaching curriculum, planning for a course, reflect on own learning and document and present own competences etc.

Mentorship. There are also variations in how intensive mentorship Programs are. Typically there will be some mutual observation of teaching, feedback and meetings about specific topics. Some universities are very precise about how many hours mentors are supposed to use on this task. It is probably a very good idea to make clear what is required, in hours, number of meetings, etc. so that both parts know what to expect.

3. The current ITU Assistant Professor Teaching Development Program outsourced to CBS

The Program comprises the following units:

- a. 2 day course - Learning to teach – basic theories of higher education teaching
- b. 2 days residential course (teambuilding with other assistant professors, peer discussion of teaching related dilemmas, ECTS, STÅ, presentation of the Teaching development Program)
- c. 1 day course - Master thesis
- d. 1 day course - Exams (exam seminar organized and offered in-house by ITU)
- e. 4 days elective courses (offered by either CBS or Learning Unit's teachIT workshops)
- f. Supervision by the departmental supervisor from ITU as well as the CBS Academic Development supervisor.
- g. 2 written assignments
- h. Teaching portfolio

3.1. Reflections on the current program

We have conducted a series of conversations with current ITU assistant professors from all sections attending the CBS program. Three themes of relevance have been identified and all are addressed in the proposal of a new Program subsequently presented.

The first theme is the **introduction to pedagogy and constructive alignment**. Comments have been made regarding the fact that most of the pedagogical content in the APP is presented simply once and then never repeated again, for instance on the residential course. One comment made approximately six months after such a course was: 'By now I forgot what they were'. The general consensus regarding learning goals is that the only reason people know what they are is that they need to put them in the course base – or are 'forced to' as someone put it, without really understanding how to do it properly or why. It has been expressed that 'something more continuous that guides you as you teach' could be of interest, however it has also been made absolutely clear that, if anything, the course burden should decrease, as most assistant professors consider it a means to becoming associate professor and not in and of itself vital for their practice as researchers.

The second theme is **assessment of students, evaluation, and exams**. A general topic is the question of how to choose the right examination form for a course. Particularly, assistant professors new to the Danish University system have expressed that it can be difficult to understand the grading system and the Danish

oral and group exam format. One assistant professor suggested that the exam course came after the first time he had tried to conduct exams, which according to him 'would have given him the possibility to reflect after having completed exams. The link between setting up course requirements (i.e. learning goals), choosing the right assessment format and supplying external censors with the relevant guidelines for judgment are some of the key concerns.

The third and final theme regards **sharing insights and experiences of teaching**. Often courses consist of a topic presentation and a subsequent discussion, leaving little room for ad hoc discussions on current issues relevant to the assistant professor. Allowing for more plenum discussion on teaching has been mentioned as a way of sharing insights. Another suggestion on knowledge sharing has been through observing others teach, and notably others that teach well. It has been suggested that this is a way of both assessing one's own practice and being inspired to do things differently.

We have taken all these reflections into account when designing our proposal for a new Program.

4. A New Assistant Professors Teacher Development Program for ITU

We would like to start by proposing the following Intended Learning Outcomes (ILOs) upon which we have based the construction of our proposal:

After successfully completing the Teacher Development Program, the participants should be able to:

- **plan, implement, and evaluate:**
 - teaching based on constructive alignment
 - learning activities relative to ILOs and educational context¹
 - assessment tasks² relative to ILOs and educational context
- **identify** and **apply** relevant pedagogical theories and didactic principles and methods
- **discuss** teaching/learning praxis with colleagues and peers³
- **supervise** projects and theses
- **identify** and **use** technology for learning activities and assessment tasks
- **reflect** on learning activities, assessment tasks, teaching praxis and own development as a teacher

¹ student centered learning, educational level (B.Sc. v M.Sc.), education form (face-to-face v online), domain specifics, ...

² incl. examination forms, ongoing, formative assessment, ...

³ overall purpose: improve own, peer, institutional teaching/learning development

The intention behind these ILOs is not to meet a particular pedagogic agenda (although there is a positive bias towards constructive alignment as an important part of ITUs educational strategy), that is, we are not interested in offering a catalogue of concrete techniques that the assistant professors have to learn in order to be successful. Our proposal is centred around encouraging assistant professors to develop a **lifelong habit of reflecting about their own teaching**, so that they can find new solutions to new challenges throughout their career. A lot of the knowledge generated here will therefore necessarily be contextual, and take its starting point in the assistants professor own situation.

4.1. Modules

We propose that the above introduced ILOs are implemented in the below modules. In brackets we have stated the estimated amount of hours to be spent by the assistant professor.. (An overview of the modules and how they meet the different ILOs is provided in the appendices A: ILOs distributed on activities combined with resources and B: Module-ILO-Visualisations.) The following section 4.2, progression, covers how these modules are temporally organized and their progression.

MODULE A: Mandatory framing course for Assistant Professors

(24 hours in total: 2 day residential day followed by 1 plus 1 day at ITU, offered every semester)

Possible Topics:

- Introduction to Teacher Development Program
- Constructive alignment and student centered learning (theory and application in course descriptions and semester/week/session planning).
- Educational context - such as educational level (B.Sc. v M.Sc.), education form (face-to-face v online), domain specifics (such as software, design etc), class size, product-process-theory activities with students, group collaboration issues, course literature, co-teaching, research based teaching.
- Pedagogical theories and didactic principles and methods
- Course (group) project work supervision.
- Engagement and motivation
- Catalogue and trial of a number of teaching methods/strategies
- Sketching a number of own learning activities based on above
- Formative assessment of students

MODULE B: Project and thesis supervision

(4 hour course at ITU open to all new staff with coming supervision tasks)

Possible topics:

- Rules and regulations (also Program specifics)
- Supervision as a learning process

MODULE C: A combination of mandatory and elective teachIT workshops

(4 x 2 hours + 2 x 2 hours workshops - open to all teaching staff)

A variation of aspects in connection to teaching and supervision are already being run based on request or proposed by Learning Unit. All teachIT workshops are open to all teaching staff at ITU (including PhDs).

Mandatory to the assistant professor are the four workshop themes:

- Collaboration with teaching assistants
- Teacher designed course evaluation
- Technologies to enhance student learning in class
- Technologies to enhance student learning between classes and on online courses

The assistant professor then has to choose 2 more **elective** workshops, some of the current electives are:

- Global activities
- Presentation and sketching
- The multicultural classroom
- Enhancing student motivation
- ...

MODULE D: Mentorship

(25 hours in total)

The assistant professor will throughout the course be assigned an experienced ITU colleague as mentor. A framework for this mentorship will be developed. However, the content will be similar to the existing role as supervisor for assistant professors. They will also discuss project and thesis supervision and other related themes from the handbook "Good advice for new faculty"; such as balancing demands, stress, handling insecurity, handling own and student expectations.

MODULE E: Teamwork and mutual observation

(28 hours in total)

Assistant professors are teamed up two & two for the whole Program based on mutual trust. Discussion of planning and ad hoc themes relevant to the two. Observation of teaching and feedback. Identification of further need for development. Each team agrees on principles for the partnership at the residential. The team works independently, administratively supported by Learning Unit and the development of a portfolio. The team meets approximately for 1 hour every two weeks but can also ask each other for feedback whenever they want.

MODULE F: Assistant Professors Teaching Club

(16 hours in total)

Every quarter of the Program, all assistant professors meet for a 2 hour meeting and discuss current themes in relation to teaching practice. Themes are collected in advance and participation is mandatory. The meetings are facilitated taking turns among the Assistant professors. Overall administration will be carried out by the Learning Unit and portfolio (presence documentation).

MODULE G: Digital learning platform basics

(2 hours)

This is a specific module about the digital platforms for support of teaching and learning in use at ITU at the moment of employment (currently learnIT). The module will cover topics such as: navigation, customization and tools for learning activities and digital hand-in.

MODULE H: Exam seminar

(6 hours)

This module is organized as a combined lecture/workshop where assistant professors will work with the topics of grading, exam forms, sparring on own exam form and other relevant issues.

MODULE I: Experiment in practice with students

(10 hours)

The assistant professor will plan and carry out at least two learning activities, at least one of these including technology. Also the assistant professor will assess student learning and carry out with students one teacher designed course evaluation.

MODULE J: Final project or thesis supervision

(30 hours)

As part of the Teacher Development Program the assistant professor will (co)supervise a final project or thesis and document and reflect upon the process following specific guidelines in their Portfolio.

MODULE K: Written assignment

(30 hours)

Based on theories of learning and educational context, the assistant professor describes a course of his / her own and argues for the choices made. This will be documented in their Portfolio.

MODULE L: Readings

(20 hours)

The assistant professor will have received a selection of a few well researched handbooks at the beginning of the Teacher Development Program. These books will be the basis of some discussions and reflection throughout the Program, and the assistant professor will need to reflect critically on some aspects of the books in their Portfolio.

MODULE M: Portfolio

(20 hours)

All assistant professors will have a personal online teaching portfolio where they will keep a number of files to document their active participation and progression as well as continuously reflect about their own learning. They will be able to use the materials collected in their portfolio as a presentation of their teaching qualifications when applying for tenure.

MODULE N: Teaching their own colleagues

(11 hours)

All assistant professors will run a teachIT workshop open to all colleagues based on a topic of their own choice, for instance the results of a teaching experiment, a particular technique or pedagogical approach. Another aspect of this is that the assistant professor, halfway through their program, will begin to learn to act as mentors themselves, by observing and giving feedback to PhD students engaged in their own Teaching development Course.

MODULE O: External supervision and assessment

An external supervisor (higher education teaching specialist) will be appointed to each assistant professor. The external supervisor observes the teaching and other activities of the assistant professor, provides

feedback and participates in the final assessment of the assistant professor. The external supervisor and the internal mentor prepare a short statement of teaching competence where the assessment is based on the intended learning outcomes. The assessment is made in both qualitative and quantitative terms, the latter scaled according to the levels: “extraordinarily competent”, “very competent”, “competent” and “not competent”. The final assessment will be carried out by a committee made of the Section Head and the Head of Department. The committee will assess the portfolio, the statement of the external supervisor and the internal mentor and will recommend that the assistant professor pass or not.

4.2. Progression

We propose that the Teacher Development Programme is distributed over two years. We have considered pros and cons for a shorter/longer period. On one hand, learning through reflection on action requires time. Therefore the program cannot be too compressed. On the other hand, it is the experience of Research & Learning Support that most assistant professors wish to be able to complete the program well before the three years contract as assistant professors terminate. Below is an overview of a suggested distribution in time of the modules based on a two year period.

Time slots and progression	1 st year				2nd year				Total hours
	quarter 1	quarter 2	quarter 3	quarter 4	quarter 1	quarter 2	quarter 3	quarter 4	
A Mandatory framing course for Assistant professors	12		6		6				24
B Project and thesis supervision				4					4
C teachIT workshops	2	2	2	2		2		2	12
D Mentorship	7	3	3	3	3	2	2	2	25
E Team work and mutual observation	6	5	3	3	3	4	2	2	28
F Assistant Professors Teaching Club	2	2	2	2	2	2	2	2	16
G Digital learning platform basics	2								2
H Exam seminar	6								6
I Experiment in practice with students		3	2		3	2			10
J Final project or thesis supervision					10	10	10		30
K Written assignment						10	10	10	30
L Readings	8	2	2	2	2	2	2		20
M Portfolio	2	2	3	3	2	2	2	4	20
N Teach colleagues				8				3	11
Hours per quarter	47	19	23	27	31	36	30	25	238

The progression table shows that the Program starts with the mandatory framing course that should give the participants a good grip of the methods and subject matter. The practical work (teachIT workshops, team work and mutual observation, experiment with students, project and thesis supervision and readings) is all the way through combined with reflection/feedback activities (mentorship, assistant professors teaching club) and of course, the portfolio, which is the most important element that binds reflection on the participants teaching practice with the theories acquired at the beginning of the Program and through readings. The more instruction oriented modules (about project and thesis supervision, digital platform and exam seminar) are spread out throughout the period so as to counteract the negative reactions to “being given lectures” that our actual assistant professors expressed when interrogated about the current program. There are two advanced activities that should transform reflection into praxis and come in the final stages of the Program: the teach your colleagues activity and the written assignment where the assistant professors should be able to produce their own theory about teaching, hopefully starting a lifelong habit of reflecting and adapting in relation to their own teaching.

4.3. Portfolio

A very important part of our proposal is the role of the teaching Portfolio as the main vehicle for reflection and ongoing management of progression. We endorse the view on reflective learning proposed by Moon (1999, 2004) and Bolton (2001), among other researchers on higher education. Reflective practice is a method that channels professional development by transforming common reflection into a competence that allows practitioners to "frame and reframe internal and external experience with openness and flexibility" (Moon, 2004: 100). The following outcomes can, according to Moon (1999), result from reflective processes:

- learning, knowledge and understanding
- some form of action
- a process of critical review
- personal and continuing professional development
- reflection on the process of learning or personal functioning (metacognition)
- the building of theory from observations in practice situations
- the making of decisions/resolution of uncertainty, the solving of problems, empowerment and emancipation
- unexpected outcomes (e.g. images, ideas that could be solutions to dilemmas or seen as creative activity)
- emotion (that can be an outcome or part of the process)
- clarification and the recognition that there is a need for further reflection

These are very well aligned with our ILOs and our general intention with this Program.

4.4. Challenges

Most scientific staff have a love of their subject matter and an eagerness to share their passion with others. However, it is not always easy to also come to love the actual job of teaching. Though most assistant professors are eager to perform well as university teachers, it is not uncommon for Danish organizers of teaching Programs for university staff to meet a certain resistance and a lack of understanding of teaching and learning in higher education as a scientific field, with useful and evidence-based knowledge. There can be an “understanding of teaching skills as something ‘natural’, which may emerge as a consequence of personal experiences”. As Krogh and Aarup Jensen write in their paper “Learning is also a troublesome affair for university teachers” (Krogh & Aarup Jensen 2011). [...]:

“Another important aspect may therefore be the “clash” of different scientific paradigms in staff development: The theories behind university pedagogy are based on different areas of science and methods (primarily social sciences, educational science, pedagogical science, science within the humanities and psychological science). University teachers coming from a different professional and scientific background (e.g. natural sciences, engineering sciences, health sciences, political science etc.) may find it challenging to understand and accept the scientific foundation of university pedagogy”.

This suggests that the introduction of this field to scientific personnel should be approached with great care and a lot of respect for what the assistant professors already know and have experienced in relation to teaching. Their experience should be integrated and contextualized in relation to theories of teaching and learning in higher education; never offered as monologue lectures/traditional courses but actualized through workshops and other active learning activities where the assistant professors themselves are a part of building new knowledge. Also, the introduction to this field should be facilitated by others who also have an understanding of the assistant professors specialized fields, therefore the big role that collegial mentors play in our proposal.

There is another aspect that reinforces this approach: assistant professors are adult learners. “Existing literature on research in adult learning illustrate that there are some very important driving forces for adults participating in education.” Lindeman has in Knowles (2005) identified several key assumptions

about adult learners (see also Buckley & Caple, 1995; Illeris, 2006). These key assumptions constitute the foundation of adult learning theory:

- Adults are motivated to learn as they experience needs and interests that learning will satisfy; therefore, these are the appropriate starting points for organizing adult learning activities
- Adult's orientation to learning is life-centred; therefore the appropriate units for organizing adult learning are life situations, not subjects
- Experience is the richest resource for adults' learning; therefore, the core methodology of adult education is the analysis of experience"

These assumptions applied to assistant professors on a teaching development Program point to the need for practice-near development such as trial and reflection (Schön 1989), observation and feedback by local mentors and colleagues, experience and discussion with colleagues in smaller communities of practice (Wenger 1998) rather than one stand-alone course after another in a university context different from the one teachers at ITU experience.

4.5. Credit/merit

As on the existing Assistant Professors Teaching Development Program, the new Program should have a policy and procedure for credit transfer. Members of credit transfer committee could be Head of Section (varies), internal supervisor (varies) and learning consultant from Research & Learning Support. Some of the assistant professors on the existing Assistant Professors Teaching Development Program will need a specific evaluation of credit transfer as they are "caught" in a transition period.

4.6. "Start package"

As part of the curricula we suggest presenting the assistant professors with a number of basic but well researched handbooks or reference manuals. All publications are well aligned with ITU's pedagogical principles:

- John Biggs & Catherine Tang, *Teaching for Quality Learning at University*, McGraw-Hill, 2007 (3. edition).
- Svinicki & McKeachie *McKeachie's teaching tips (strategies, research, and theory for College and University Teaching)*, Cengage Learning, 13th revised ed.

- Rienecker, Lotte, Jørgensen, Peter Stray, Ingerslev, Gitte Holten og Dolin, Jens (red) (2013): Universitetspædagogik. Samfundslitteratur. (In Danish)
- Boices: *Advice for New Faculty Members*

5. Considerations about implementation

This section presents our considerations about the cost of the proposed new Program in terms of staffing and resources, and looks at the opportunities for using the modules of the Program for internal development of all faculty as well as for external participants (business opportunity). It also compares cost of in-house development and out-sourcing solutions.

5.1. Staffing & recruiting

The proposal we have presented relies heavily on local senior faculty to act as mentors and supervisors. We recommend that the task allocation and expected number of hours is carefully considered and communicated to all the participating staff, in order to avoid unnecessary frictions. The participation in this program should become a regular part of being a senior member of staff in the same way that one takes part in different committees and working groups in the organization. Our proposal will also require a dedicated coordinator from the Research and Learning Support Unit that can deal with the administration, coordination, and communication with all the involved scientific staff. The coordinator would spend a considerable time on the tasks. However, it should be taken into consideration that a considerable amount of time is already being spent in Research & Learning Support on coordination of the existing programme. Some of the modules of our proposal transfers some tasks from Research & Learning Support to the assistant professor at the same time as they work as learning activities for the assistant professor (feedback to PhDs on their teaching, teaching at teachIT workshops, general feedback to assistant professors). At the same time the programme's concept of collegial knowledge sharing and development lift of some of Research & Learning Support's resources spent on supporting the achievement of the relevant goals of the Education Strategy and ITUs Education quality assurance policy.

Moreover, one or more senior scientific members of staff should also be appointed as the scientifically responsible(s), to be a part of developing the program and ensuring that the pedagogic approach is relevant to the scientific backgrounds of the assistant professors⁴. The scientific responsible(s) would play

⁴ It is currently hard to propose specific estimates of work hours. However, the following may serve as a guide: Susana and Anker developed the DKK Master Thesis start-up workshop: two times 3-hour workshops with homework, in all 17 hours work per student. Both used around 70 hours in planning and conducting the first workshop. The format was basically sound but needed some revision, which took around 50 hours. Since then the workshop has been run with a modest amount of wo/man hours: each 10-20 hours. As the Assistant Professor Program is *much more*

the role of "ambassador(s)" between the specialized fields of the scientific staff and the field of teaching and learning in higher education in order to neutralize some of the challenges described above.

5.2. Resources - in-house/out sourcing

The below figures are only an estimation of the costs of the new in-house solution. For information the present Teaching development program at CBS costs around 45.000 per person + administration (+ the resources spent on ITU modules that are part of the program).

Human resources for total program all assistant professors	Consumption per hour
1 assistant professor. Of this direct contribution the hours spend teaching/supervision of students and colleagues during the program are 95 ⁵ hours	238
Experienced VIP instructing the Assistant Professors as a group - per year	49
VIP mentorship	25 x the number of assistant professors
External consultant instructing Assistant Professors as a group - per year	10 (confrontation hours)
External supervision and assessment	12 x the number of assistant professors
Learning Unit instructing all Assistant Professors as a group - per year	46
Learning Unit administration per year	220

comprehensive - quantitatively around 15 times "bigger" than the DDK Master Thesis workshop - planning and running the first Program and revising it thereafter must be expected to require hundreds of workhours.

⁵ The modules: Final project or thesis supervision, teachIT workshop, Associate Professors Teaching Club, Peer sparring, Experiment in practice with students

1 Assistant Professor costs for his /her full program	DKK and hours
Residential course: Hotel (including meeting room, food & beverage, hotel bedroom),	1500 DKK incl VAT
Literature:	1600 DKK Incl VAT
Assistant professor (238 minus 95)	143 hours
Experienced VIP	5 hours
Internal mentor	25 hours
External consultant	1 hours
External supervision and assessment	12 hours

5.2.1. The fee of Assistant Professors Program at other DK universities – out-sourcing

The nearby universities and relevant departments do not seem to have an offer to external faculty, apart from CBS and RUC. The offer from CBS as a complete package is in reality non-existent as they do not any longer provide supervision for external assistant professors. In short they cannot offer: supervision, master thesis course, portfolio. Without these there is no point in participating in the residential course either. However, the possibility of ITU assistant professors taking part in the elective courses at CBS remains a possibility. Concerning RUC, when asked directly, they state that they do welcome external participants but they pay no particular attention to them. This said, it remains a fact that many of the universities have recognized teaching and learning higher education researchers and staff that potentially could be hired on a consultancy basis to teach within the framework of ITUs in-house solution.

CBC (Copenhagen Business School): (Existing professors program at CBS): DKK 46,500 + expenses for transportation + 175 hours.

RUC (Roskilde University): DKK 30,000 + expenses. The course is offered in English every other year. External participants are welcome but there is no particular attention or path for them.

- Introduction to the assistant professor program - 1½ day course
- Portfolio - 3 day course
- Collegial intervision - 23 hours cover the entire course of seminar days, observation of others' teaching and subsequent intervision discussions
- Project supervision - 1 x full day + 2 x ½ day, supplemented with exercises between the second and third course day.
- Course pedagogy – 1 x full day + 2 x ½ day, supplemented with exercises between the second and third days
- ICT and learning - 2 days

- 2-3 elective courses

DTU (Danish Technical University):

- Module 1, Basic teaching & learning, 4 days course: internal course fee is DKK 5.000. However, DTU does not have a business model for this course!
- Module 2-4: internal course fee DKK 25,500. However, DTU does not have a business model for their assistant professors program as it is anchored in projects in teachers own departments!

Copenhagen University – Science and Sund

- No business model for their assistant professors program.

Copenhagen University - Social Science

- No business model for their assistant professors program.

5.3. Internal use of modules

Some of the modules in our proposal for a new Assistant Professors Teacher Development Program could be offered to all faculty. For instance both research assistants with teaching obligations and part-time lecturers for whom there is at present no other offer than teachIT workshops and one-on-one guidance on an ad hoc basis. Also, existing workshops and seminars can be an (elective) part of the new Assistant Professors Teacher Development Program.

Modules that can be offered to all faculty	The module is an existing activity at ITU already
B Project and thesis supervision	No
C teachIT workshops.	Yes
D Mentorship	No
G Digital learning platform basics	Yes
H Exam seminar	Yes

5.4. External use of modules

Possibly, the New Assistant Professors Teacher Development Program could integrate a business model. To the extent that modules of the Program can function as stand-alone and it is administratively feasible they could be offered to teaching staff from other universities. CBS has expressed concrete interest in ITU offering this.

The Danish universities' pedagogical network (Dansk Universitetspædagogisk Netværk, DUN), has established a cross-institutional secretariat on which resources ITU may draw in case we wish to open some of our modules to other universities. The DUN secretariat can contribute with invitations, sign up and tuition fee.

5.5. Evaluation of New Assistant Professors Teacher Development Program

We suggest that the pilot New Assistant Professors Teacher Development Program is formatively evaluated during the first iteration plus summatively after the first assistant professors have completed the Program. The main evaluation criteria will be based on the intended learning outcomes and format of the Program, but also on relevance according to practice needs, adherence to strategic university goals, coherence with pedagogical development of all faculty, ability to support the general development of knowledge sharing and collegial collaboration among teaching staff, administrative and economic resources. The summative evaluation including recommendations will be presented to Department Management, Education Group and Study Board for discussion and decisions on adaptations.

5.6. Digital platform for knowledge sharing, portfolio and administration

We suggest using one of ITU's existing platforms (either learnIT or Wikit – other suggestions are welcome) to support the New Assistant Professors Teacher Development Program on a "daily" basis. The platform should support: knowledge sharing between participants, portfolio for reflection, documentation and presentation, as well as the administration of the New Assistant Professors Teacher Development Program.

6. A final note about general work practice methods for young faculty

The working group supports management's identification of a need for development of young faculty's general work practice methods. We were asked to consider if it could be a part of a Teacher Development Program. To some extent we find that this issue is related to the development of teaching practice and competences; for instance as thematically described in the suggested handbook "Advice for new faculty". We also recognize that there may also be need for more direct instruction in efficient work practice related to the general employment of the assistant professor as researcher, teacher and administrator, where competences in relation to management and administration, communication and presentation are required.

However, we consider that offering general guidance about scientific personnel work practice is out of the scope of a Teacher Development Program's intended learning outcome. Moreover, it could contribute to

move the focus away from teaching and learning, which is our concern here. We suggest that assistant professors are offered at least a course similar to the course offered to administrative staff in Personal Efficiency and Planning (known in ØP as PEP). Such a course could be anchored in the Personnel Department and perhaps frequented by other faculty as well on a need-to basis.

References

- Biggs & Tang. 2007. *Teaching for Quality Learning at University*. McGraw-Hill.
- Boice. 2000. *Advice for New Faculty Members. Nihil nimus*. Allyn and Bacon
- Bolton, G.. 2001. *Reflective Practice. Writing and Professional Development*. London: Sage.
- Buckley & Caple. 1995. *The Theory and Practice of Training*. Kogan Page
- *Cirkulære om stillingstruktur for videnskabeligt personale ved universiteter*. 2007. Personalestyrelsen
- Illeris K. 2006. *Læring*. Roskilde Universitetsforlag.
- Knowles, M. S. et al.. 2005. *The Adult Learner. The definitive Classic in Adult Education and Human Resource Development*. Sixth Edition. Elsevier.
- Krogh & Aarup Jensen. 2011. *Learning is also a troublesome affair for university teachers*. Om adjunktpædagogikum. Improving Student Learning: Global Theories and Local Practices: Institutional, Disciplinary and Cultural Variations. ed. / Chris Rust. Vol. 18 1. ed. Oxford: OCSLD.
- Moon, J.. 1999. *Learning Journals. A Handbook for Reflective Practice and Professional Development*. New York: Routledge.
- Moon, J.. 2004. *A Handbook of Reflective and Experiential Learning*. New York: Routledge.
- Rienecker, Jørgensen, Stray, Ingerslev, Holten & Dolin (red). 2013. *Universitetspædagogik*. Samfundslitteratur.
- Schön, D. A.. 1987. *Educating the reflective practitioner*, Jossey-Bass
- Svinicki & McKeachie. 2011. *McKeachie's teaching tips (strategies, research, and theory for College and University Teaching)*. Wadsworth: Cengage Learning.
- Etienne Wenger. 1998. *Communities of practice*, Cambridge

Appendices

Please see attachments to this report

- A) ILOs distributed on activities combined with resources (Excel sheet)
- B) Module-ILO-Visualisations 1-6 (pictures) (minor inconsistencies with report structure due to iterative process in working group. The report is the fundament).