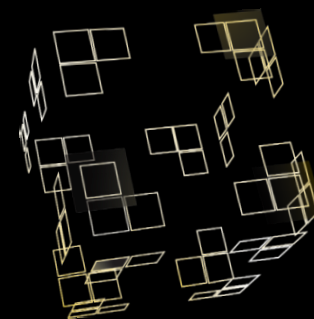
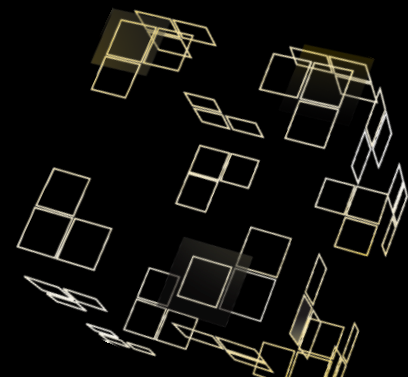
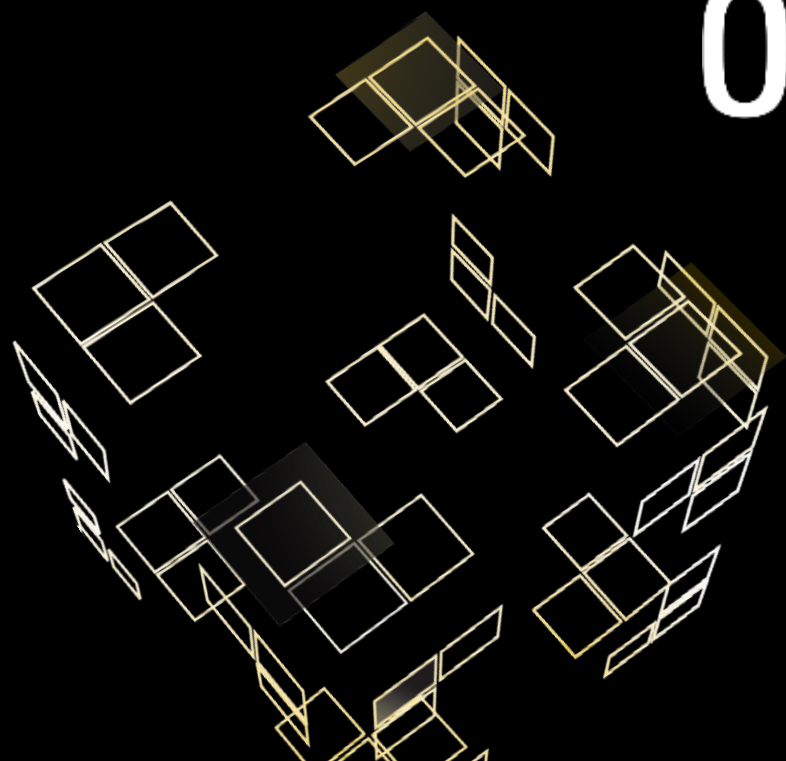


Doctoral Education @

**UNIVERSITY
OF TWENTE.**



Paul van Dijk
Director TGS

EUA-CDE
Jan 2018

IN THIS PRESENTATION:



1.
CONCEPT



2.
CONTENT



3.
LESSONS
LEARNED



4.
PHD SURVEY



5.
QUESTIONS



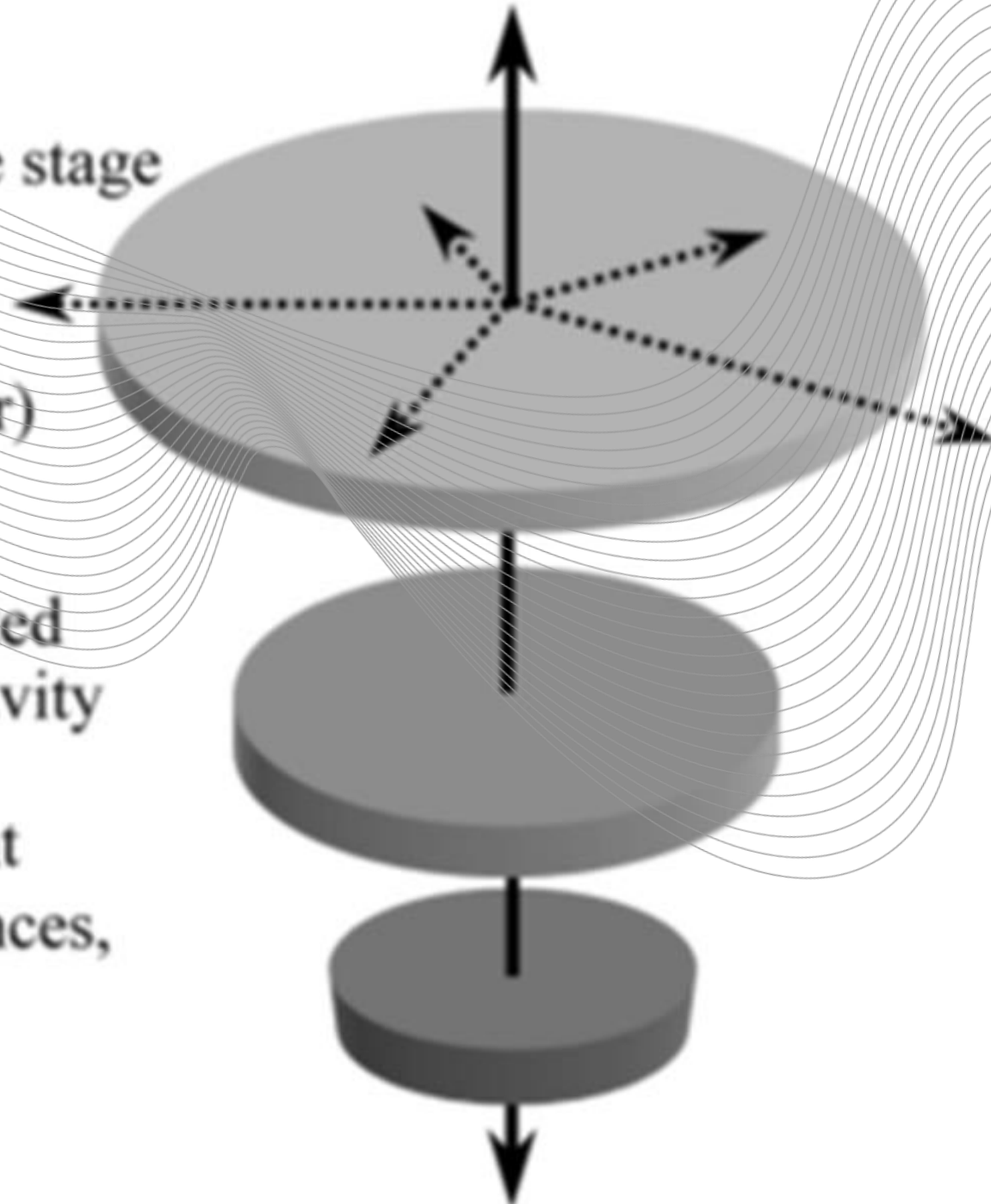
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Staged growth model (Cook-Greuter, 2004): Lateral growth and horizontal transformation

Horizontal = expansion at same stage
(developing new skills, adding
information & knowledge,
transfer from one area to another)

Up = Transformation, vertical
development, new more integrated
perspective, higher center of gravity

Down = temporary or permanent
regression due to life circumstances,
environment, stress and illness.



3rd cycle: PhD

2nd cycle: MSc

1st cycle: BSc



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Competency card game



Talk with peers about various skills; what do you need in training?

Use this in discussion with PhD supervisors

Reference: PhD profile



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UT PhD profile

	The moment you start with your PhD research, we expect you to	When you finished your PhD at the UT, we expect you to
RESEARCH DOMAIN, SKILLS & TECHNIQUES	<p>Have basic understanding of the requirements of research at MSc level;</p> <p>Have basic knowledge in the research domain; Be able to apply those requirements to own research under supervision.</p>	<p>Have a systematic understanding of own field of study and a mastery of the methods of research associated with that field;</p> <p>Make a contribution that extends the frontier of knowledge by developing a substantial body of work which merits national or international refereed publication.</p>
RESEARCH MANAGEMENT	<p>Conceive, design, implement and adapt a minor process of research with scholarly integrity;</p> <p>Be able to divide a project into small steps;</p> <p>Be able to give support to a research project leader.</p>	<p>Conceive, design, implement and adapt a substantial process of research with scholarly integrity;</p> <p>Be able to plan own research;</p> <p>Be able to accept a leading role in research, society or business.</p>
RESEARCH ENVIRONMENT	<p>Have problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts.</p>	<p>Be able to explain/use main concepts of the research environment, e.g. financing, integrity, safety, principles of research;</p> <p>Have a clear view on the position and role of own research within the research group and (inter)national research.</p>
HIGH TECH, HUMAN TOUCH	<p>Be able to apply insights of the study in other contexts</p>	<p>Cooperate for your research with other researchers, businesses and government bodies and other stakeholders; have the capacity to combine insights of different sciences and work with researchers of different research backgrounds;</p> <p>Identify the needs for new research of society and businesses;</p> <p>Be able to look beyond the boundaries of own specialisation and place own research in societal/historical perspective;</p> <p>Develop/contribute to technology of the future to stimulate change, renewal and progress in society; contribute to the future of the region, the Netherlands and the world;</p>
NETWORKING AND TEAM WORKING	<p>Participate in internal and external research networks and teams.</p>	<p>Participate and take a lead in developing and maintaining relevant internal and external research (academic) networks and teams.</p>
COMMUNICATIONS SKILLS	<p>Communicate your conclusions and the underpinning knowledge and rationale (restricted scope) to specialist and non-specialist audiences (monologue).</p>	<p>Communicate with your peers, the larger scholarly community and with society in general (dialogue) about your area of expertise (broad scope).</p>
PERSONAL EFFECTIVENESS	<p>Be able to manage own time and work to deadlines under supervision.</p> <p>Be able to plan work and balance needs of different projects.</p>	<p>Be able to achieve outstanding performance at work and study;</p> <p>Be able to manage own time and work to deadlines;</p> <p>Be able to reflect on and improve own effectiveness.</p>
CAREER MANAGEMENT	<p>Be able to motivate why you want to start a PhD.</p>	<p>Make career enhancing decisions and execute these.</p>



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Rules and regulations

- Doctoral Regulations
- Charter for PhD candidates
- UT PhD profile
- Doctoral Education guidelines

Support:

- Confidential advisors on scientific integrity
- Confidential advisors on undesirable behavior
- PhD Counselor (who can refer to a psychologist)
- Formal procedures through Dir. TGS and Doctorate Board
- Formal objection and complaint procedures

1) Basic PhD Skills (5EC)

Content:

- Academic Publishing
- Academic Presentations
- Data management
- Information skills
- Academic integrity
- Intake, TGS workshop, T&SP, Supervision (incl. qualifier/reviews)

2) Research Support

- Scientific Information (Advanced)
- Data Management (Advanced)
- Analytic story telling
- Technical Writing & Editing

3) Language Courses (max. 5 EC)

- Dutch (various levels, also online)
- English pronunciation for speakers of Dutch
- Pronunciation training for East Asian speakers of English
- English for lecturers
- Cambridge First/Advanced/Proficiency

4) Personal Development

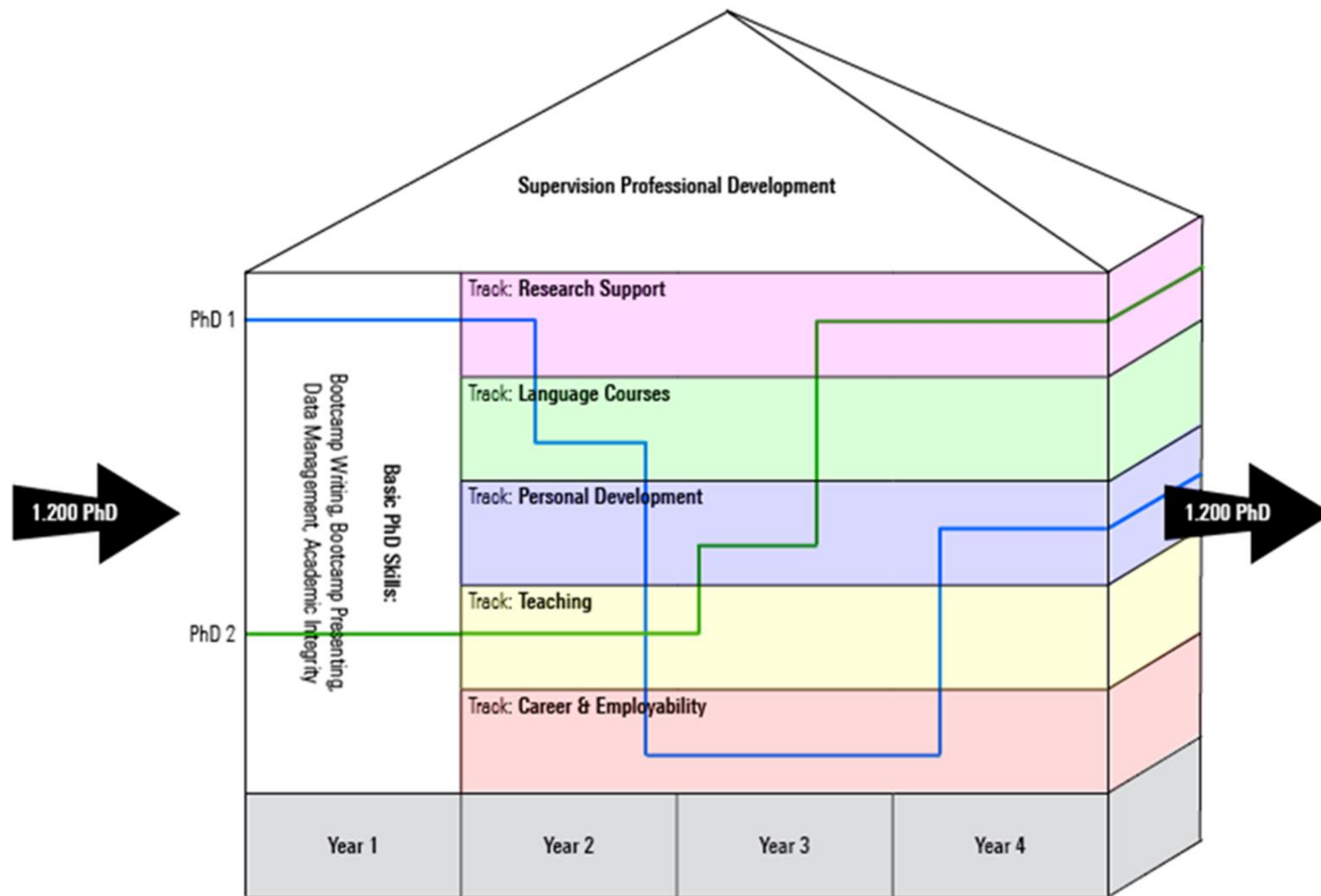
- Coaching bootcamp
- Professional Effectiveness
- Project management for PhD's
- Creative thinking
- Cultural awareness

5) Teaching Courses

- A Taste of Teaching (for all who teach; incl. UBQ voucher)
- Designing a lesson and a course
- Practical teaching skills
- Supervising students

6) Career & Employability

- Career Orientation and Application
- Interview Skills in English
- Lean green belt
- Consortium dynamics
- Competing for grants
- From idea to patent to business
- Entrepreneurial behaviour
- Summerschool EntrepreneurialU



LESSONS LEARNED

- Doctoral Education in PhD Charter, PhD profile and DE guidelines
- Card game to discover own gaps
- Tailor-made programme between supervisor and PhD candidate
- Avoid “compulsory”, except for TGS introduction and Integrity course
- Cascading courses: Basic (for all) and Advanced (by choice)
- Larger group size: teachers instruct coaches to moderate sessions
- Engage senior PhD’s in coaching juniors
- ...and give them EC’s for coaching bootcamp + actual coaching PhD’s

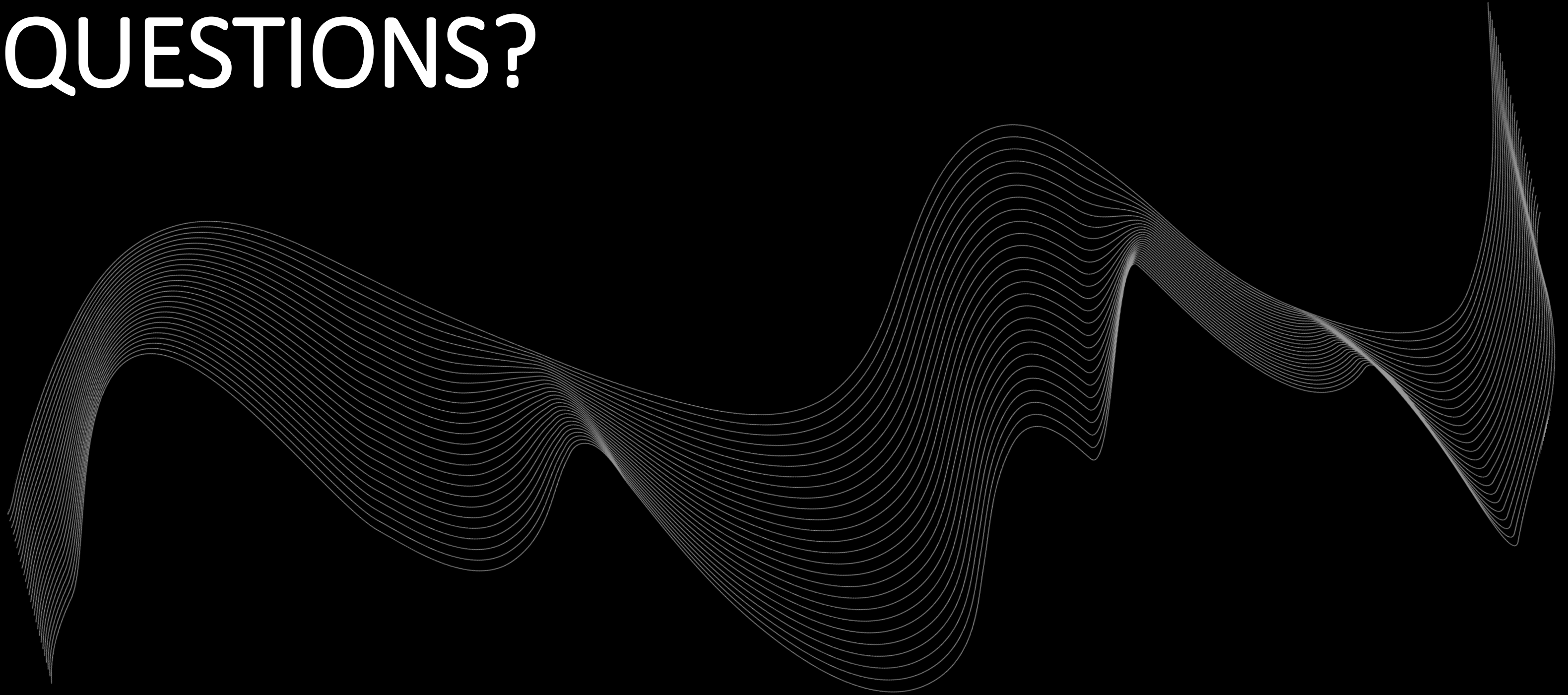
PHD EXPERIENCE SURVEY

- September 2016, n = 446, response = 49.2%
- Overall satisfaction 7.4 (out of 10)
- Overall supervisor satisfaction 3.9 (out of 5)
- Basic set of questions also used at other NL universities

Areas of dissatisfaction ($\geq 10\%$):

- Doctoral Education (availability, discipline subjects)
- Teaching load (but also: enjoy, add value)
- Supervision (availability, interaction)
- PhD capabilities and isolation

QUESTIONS?



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Basic Skills and Learning Tracks for PhD Candidates at the University of Twente

Paul van Dijk, director Twente Graduate School, University of Twente, The Netherlands.

11th EUA-CDE Thematic Workshop

“The Impact and Outcomes of Doctoral Education Reform in Europe”

Hosted by the University of Malta, Valletta, Malta, 18 - 19 January 2018

Summary

Generic doctoral education at the University of Twente has been transformed from optional extra-for-few to must-have-for-all doctoral candidates (incl. externals). This is accommodated using a set of basic skills complemented by a cafeteria model with various learning tracks: Research Support; Language Courses; Personal Development; Teaching Skills; Career & Employability.

Outline

In 2014 The Twente Graduate School (established 2009) introduced a PhD Charter (with complementary changes in the Doctoral Regulations) specifying the rights and obligations of doctoral candidates during their PhD research phase. One of the newly introduced features entails a doctoral education programme of 30EC, roughly 50/50 in discipline oriented subjects versus generic skills (Research Support; Language Courses; Personal Development; Teaching Skills; Career & Employability). The intended activities have to be listed in the Training & Supervision Plan that is due after three months of the PhD phase, and progress is subject of discussion between the candidate and the supervisors in the annual reviews. PhD candidates are free to select their subjects in consultation with their supervisors (and change them if deemed necessary) within general boundary conditions specified in the doctoral education guidelines. About 250 PhD candidates register annually at the University of Twente. Subjects can also be taken outside the university, for example at national research schools or at international meetings. Informal learning and on-the-job training can be part of the list, as well as distance education (MOOCs). This presentation will focus on the generic/academic/broadening skills.

Some of the challenges to overcome were:

- The increase of participants due to the obligatory 30EC (from ‘happy few’ to must-have-for-all);
- The uncertainty in choice of the participants (there is almost free choice in subjects, except for an introductory workshop and a course on academic integrity).
- The many providers of specialized courses, both inside and outside university.
- The budget.

Some of the solutions we worked out in order to be able to offer the appropriate subjects to the PhD candidates are:

- A competency game during the TGS introductory workshop to help participants discover subjects that could be helpful for them.
- A set of basic academic skills bootcamps, in principle for all PhD candidates in their first year, including:
 - Academic Publishing;
 - Academic Presentations;
 - Data management;
 - Information skills;
 - Supervision;
 - Academic integrity.

- Follow-up courses for the subsequent years, grouped in 5 learning tracks:
 - Research Support;
 - Language Courses;
 - Personal Development;
 - Teaching Skills;
 - Career & Employability.

Some of the new features incorporated in the design include:

- Preference for in-house providers of the courses, and renegotiation with external providers.
- Bootcamps (see list above) to accommodate large groups of participants (50-80 instead of 10-15).
- Senior PhD candidates are trained as coaches to facilitate guidance and feedback for bootcamp participants. This changes the role of the staff (they train and guide the coaches now). The set-up is positively evaluated by the participants.
- In this way the senior PhD candidates can also gain extra EC's in their list, and we envisage that it will be a common step to become coach after having participated in the bootcamps.
- The design of a "Taste of Teaching" course to equip all PhD candidates that will actively engage in teaching during their PhD phase. The assignments can entitle participants to a voucher that can be exchanged in the UBQ basic qualification in teaching trajectory that is compulsory for employees.

The PhD experience, a survey to about 1000 PhD candidates, September 2016, some highlights:

- Basic set of questions used in the survey developed and shared with other Dutch universities.
- Survey at UT conducted in September 2016: n = 446; response rate 49.2%
- Overall satisfaction 7.4 (on 10 point scale), supervision satisfaction average is slightly higher.
- Areas of significant ($\geq 10\%$) dissatisfaction: Doctoral education, Teaching load, Supervision, PhD capabilities and PhD isolation.