



**Development Dialogue Agenda Computing Science d.d 29-11-2019**

**CROHO-number(s): 56978, 60364**

**Date visitation: 28-29 November 2019**

**Location:** FSE, Faculty Room Bernoulliborg

**Participants:**

Participating on behalf of the programme: Deputy programme directors BSc/MSc, Heads of research department (vakgroepvoorzitters CS), Programme coordinator Computing Science

Participating on behalf of the visitation panel: all panel members

In het Beoordelingskader voor accreditatie in het hoger onderwijs (NVAO, 2016, 2018) is een ontwikkelgesprek opgenomen. De opleiding voert tijdens het ontwikkelgesprek een gesprek met het panel waarin mogelijke verbeteringen vanuit een ontwikkelperspectief aan de orde komen. De inhoud hiervan is geen onderdeel van de beoordeling, maar biedt de opleiding de gelegenheid toekomstgerichte vragen te bespreken. De opleiding mag hiervoor zelf onderwerpen indienen die met het panel besproken en bediscussieerd worden.

**Report**

During the development dialogue, the panel reflected upon a number of issues put forward by the Faculty and the CS programmes.

1. Steep increase of first year students and internationalization of the student population. In line with this development; should we consider a Numerus Fixus or are there other options to control the intake?
2. High dropout rate in first year (optional, as addressed during the audit)
3. How to deal with students with a performance disability, especially in the autism spectrum who do not meet the learning outcomes.

In response to the final session with management the development dialogue starts with:

4. Pro-active approach to future crises; possible actions to be taken on predicted developments.

The panel starts with a general remark on the reactive attitude seen within the programme management. CS should focus on how to become more pro-active. Recognize the present situation as a crisis and step into the crisis management mode. Change is an opportunity to model the future; embrace instead of push it away. To strengthen the programme, you need space, staff and an organizational framework. Convince FB and UG Board with numbers. Benchmark models of intake for a better overview.

CS and AI were initially marginalized by the faculty. There is currently a growth strategy for your programme; make use of it and use the new money available. You are competing with others, some of them are shrinking. Make a SWOT analysis; find the opportunities. Collect data from all sources within the faculty. Appoint someone in the role of crisis manager and excel wizard within the programme or institute who unifies ideas, problems and tangible numbers through different scenario's and a model with parameters. Measuring is knowing; Business Intelligence is needed.

CS is embedded in a broad faculty with a physics/chemistry orientation. The programme MT is wondering if scaling down is an option, isolate CS in a smaller faculty? The panel noticed that most universities have CS embedded in a broad faculty (7), and 3 more isolated. CS staff numbers are significantly lower here than at other universities. Maybe Groningen can retrieve some student-staff ratios from other CS programmes. Others embraced CS more, but not in Groningen. Decide if it's a strength or a weakness to be relatively small.

Get rid of the defensive attitude, don't look at what happened as that's history. Eindhoven is currently investing 100 ME in an AI institute.

Is CS missing new areas? The general conviction of the panel is that the broader the department, the less deeper it gets. Develop on security; high demand and security awareness and Network Services Systems. Build on your solid base which makes it easy to adapt to a niche in the market or specific job. What does industry really need; both regionally and nationally and involve your Advisory Board.

Ad 1; Preparation for Numerus Fixus takes 2 years. Political shift; no interest in Numerus Fixus and Sector plans are against it. Try anyway; explain what would happen if you do not get it. Predict possible extreme scenario.

Ad 2; Drop-out rate is in line with other CS programmes according to the panel. It's hard, but the panel appreciates that you pay attention to it. Students have a wrong perception of the programme. Learning analytics; how do they perform in specific courses? Advice is to collect data where they drop out and what risk factors negatively influence BSA. Share this info with students. Start is made with faculty wide Early warning system.

Use BI portal contacts at university level (central Bureau) or CIT/ESI; the panel proposes to develop a dashboard for students how they compare to others.

Ad 3: Autism spectrum. Dilemma between strict learning outcomes or be lenient to certain aspects, e.g. working in groups. We no longer differentiate. Rise of attention to the subject. There are specific workshops for lecturers. A suggestion is to make them also available for students. Look for coaches to help them. Professional help provided by the university is needed to meet the learning outcomes of a programme. How far should a university go in the well-being of students?

Don't adapt, but accommodate.