Report development dialogue BSc & MSc Life Sciences RUG
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<u>Participants</u>
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Panel: Ellen Blaak, Jelle Keijzer, Menno Witter, Mieke Latijnhouwers, Roos Masereeuw, Ton Bisseling, Bas Reichert
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<u>Programmes discussed:</u>
BSc Biology (ISAT 56860)
BSc Life Science and Technology (ISAT 56286)
MSc Ecology and Evolution (ISAT 60365)
MSc Biomolecular Sciences (ISAT 60616)
MSc Marine Biology (ISAT 60609)
MSc Biology (ISAT 66860)
MSc Biomedical Sciences (ISAT 66990)
MSc Medical Pharmaceutical Sciences (ISAT 60611)

1. *Academic skills and learning trajectories*

The programmes are working on implementing learning trajectories regarding academic and professional skills. This has proven to be challenging for programmes that have multiple tracks and electives. The programmes wonder how this can be implemented in a sustainable way. Committee members suggest appointing a coordinator responsible for skills education in each programme. This person could be made responsible for a skills learning trajectory, maintaining an overview of the skills education offered throughout the courses and ensuring that all routes provide sufficient training. Any adaptations to skills components in courses should be discussed with this coordinator.

If necessary, skills can be split in several components. Instead of writing a full research paper, students could learn to write an introduction in one course, a hypothesis in another course and so forth. Another option is to assign skills training to specific periods in the curriculum rather than to individual courses. This means that whatever elective a student chooses, he or she always receives comparable skills training

An option that the BSc Biology is considering is to have students build a portfolio throughout where they demonstrate the skills they developed during the curriculum. The committee approves of this idea, with several committee members having a positive experience with this system.

2. *Tracks*

Several MSc programmes offer multiple tracks, up to 5 or 6 tracks in the MSc programmes Biomedical Sciencs and MPS. The programme asks the committee whether they think this is too much. The committee thinks that the MSc programmes should limit themselves to a select number of tracks that reflect the unique profile of the programme. Any further specialization could be provided in the form of electives, and specific combinations thereof that can be suggested to students.

The same applies to the MSc Biology, for which the programme management is considering adding programme-specific tracks. According to the committee, the unique strength of this programme is its

flexibility and broad, integrative character. By adding specialized tracks to the programme, it risks trying to be two things at once. The committee thinks that students would benefit more from examples that demonstrate how electives can combined, rather than fixing such combinations in tracks.

3. Capacity problems in popular courses

Several BSc and MSc courses are dealing with capacity problems. They cannot accommodate all students that want to follow those courses as an elective, and the struggle with a fair distribution of the few available places. This is in particular the case for courses offered in a small-scale setting in the MSc programmes Biomolecular Sciences, Marine Biology and Ecology & Evolution. Furthermore, the BSc Life Sciences & Technology foresees capacity problems for the upcoming third year, where students have to follow all their electives at other programmes in the same semester. The committee shares several methods used at other universities, such as a draw system with preferred places for students that were not selected in the previous year, or reserved places for specific programmes.

However, both the committee and the programmes realize that the capacity problems itself are the real issue. The committee thinks that it would be fair to stop offering courses with only a few open places as electives to other programmes in order to better manage the expectations of students. This leaves the open places to students that follow that course as part of a previously agreed upon curriculum, such as a minor or a free research track.

4. Availability of research projects

The growing student numbers put a significant claim on the available projects and time for supervision, and the programmes struggle with accommodating all students. This problem has become urgent for in particular the MSc Biomedical Sciences, as the UMCG has put a cap on the available research places for students. The committee brainstorms on possible solutions, such as switching from two smaller research projects to one larger research project, and dropping the requirement that students have to do their first research project internally at FSE or UMCG.

Some of the committee members have good experiences with larger research projects. A longer project allows students to really become part of a research group and obtain in-depth skills over a longer period. Some universities integrate a long research project with education in the form of tutor groups and colloquia in which students train their research skills. However, the committee also understands the benefit of two smaller research projects. This provides students with a valuable learning experience, as they can improve themselves by experiencing the research cycle twice. In any case, an exception should be made for students in the SBP track, as the first research project is one of the final products of their curriculum. An external research project, especially outside academia, might not provide students with an academic environment comparable to that at FSE or UMCG. although that can be countered by working with preferred partners. Nevertheless, both solutions should be considered if the capacity problems cannot be solved otherwise.