

Learning Forum 2018

UNIS would like to welcome you to the 5th Learning Forum which takes place at UNIS from Tuesday 16th to Thursday 18th of October. The Learning Forum is an event where the entire UNIS staff can share and gain knowledge regarding research based education, course construction and development. The 2018 Learning Forum will especially focus on **collegial sharing practice** where 12 of our colleagues at UNIS will share, raise questions and discuss a broad spectrum of different methods to increase learning. We are very much looking forward to this event and highly appreciate all contributions to the Learning Forum this year.

The aim is that, after the Learning Forum 2018, the participants will:

- *have knowledge about the educational quality work performed at UNIS*
- *know techniques that contribute to and potentially improve good teaching*
- *have shared good teaching practice with colleagues*
- *have gained motivation and inspiration to further develop their pedagogical expertise within teaching and learning*

All plenary sessions will take place in Lassegrotta.

PROGRAM

Learning Forum 2018: October 16-18

Day 1 – October 16:

09:00 – 09:15 Opening and Welcome in Lassegrotta - Harald Ellingsen, Managing director of UNIS

09:15 – 09:45 *UNIS - 25 years of teaching* - Hanne Hvidtfeldt Christiansen, Vice Dean of Education

09:45-10:00 Break

10:00 – 10:45 *Educational quality work at UNIS* - Hanne Hvidtfeldt Christiansen, Vice Dean of Education

10:45 – 11:00 Break

11:00 – 12:00 Group sharing sessions I (5 different themes) – descriptions below

12:00 – 12:45 Lunch will be served for everybody at the UNIS cantina

12:45 – 13:30 *bioCEED – Status, ongoing projects at UNIS* v. Pernille Bronken Eidesen, Deputy leader of bioCEED, Torstein Hole, PhD student UiB and Tyra Lynch and Ingvild Sørensen, Student representatives bioCEED UNIS.

13:30 – 13:45 Break

13:45 – 14:45 Group sharing sessions II (4 different themes) – descriptions below

14:45 – 15:00 Break

15:00 – 15:45 *How do students learn through working in field excursions?* - Torstein Hole, PhD student UiB.

Day 2 – October 17:

09:00 – 10:00 *Capture an audience, hook, line and sinker-* Janet Holmén . After twenty years of teaching, Janet Holmén knows a thing or two about oral presentations. In this lecture she will demonstrate a wide range of strategies. Can you spot them all?

10:00 – 10:15 Break

10:15 – 12:15 Workshops x 2 (1. *Scientific writing*, 2. *Collegial peer review*) – descriptions below. Break will be provided at 11:15 – 11:30

12:15 – 13:00 Lunch – will be served for everybody at the UNIS cantina

13:00 – 13:30 *News from iEarth – Centre for Integrated Earth System Education* - Lena Håkansson, Associate Professor from AG

13:30 – 15:30 Workshops x 3 (1. *Scientific writing*, 2. *Collegial peer review*, 3. *Digital tools*) - descriptions below. Break will be provided at 14:30-14:45.

15:30 – 16:00 Vice Dean of Education, Hanne Hvidtfeldt Christiansen, sums up day 2; discussions, oral evaluation

Day 3 – October 18:

09:00 – 12:00 Departmental meetings (rooms will be announced during Learning Forum)
It is recommended to bring along student counselors, especially to address administrative issues. Each department can decide the topic of the meetings and whether they want to extend the meeting throughout Thursday or Friday.

→ *No lunch served, the departments may organize something themselves.*

This year there will be lunch served Tuesday 16th and Wednesday 17th for the participants of Learning Forum 2018. Note that there will be no joint dinner this year.

External presenters:

1. Janet Holmén



Title of lecture: *Capture an audience, hook, line and sinker*

Title of workshop: *How can we improve the student's writing?*

Janet Holmén is an editor, translator and teacher of scientific writing. Her basic training was in biology, chemistry and earth sciences. Having worked for many years at Karolinska Institutet, Sweden's main medical university, she is also well acquainted with biomedical research. One of her tasks at KI was to edit scientific manuscripts prior to submission, and she still regularly edits papers on a free-lance basis. She has also served as editor for international journals such as *Life Sciences* and *Polar Research*. In 1998, she began teaching courses in scientific writing for PhD students. The course she developed, "Writing Science", differs from standard academic writing courses in that it contextualizes the written word, highlighting the many roles it plays in scientific communication. Rather than merely presenting theoretical principles, Janet's course puts students in situations where they discover for themselves why the principles are valuable, and therefore internalize them. Academic writing is notoriously dull. Janet wants to make it more fun!

2. Torstein Hole



Title of lecture: *How do students learn through working in field excursions?*

Torstein Nielsen Hole is a PhD student at the Centre of Excellence in Biology Education (bioCEED). As an Education scientist by training, he has worked as a lecturer in pedagogy at the University College of Bergen. His PhD research is focused on the relationship between work and practice, and science education. In collaboration with UNIS, he has published an ethnographic study on field excursion learning.

Collegial sharing sessions Tuesday:

All sharing sessions takes place on Tuesday. The sharing session is organized as one hour long session with an introduction to the theme and an around the table discussion /feedback from the participants. Participants signs in on two sessions, one before lunch and one after lunch. In forefront of LF the participants will receive an email with a link to sign in and choose which sharing sessions they would like to attend.

Tuesday 11-12:

1) Using scientific literature in the classroom

Lead by Emma Bland, Postdoc AGF

Where: OPS

In this session we will discuss ways in which peer-reviewed scientific literature can be used in bachelor- and master/PhD- level courses to achieve a range of general and specific learning outcomes. Learning activities conducted during two Arctic Geophysics courses will be presented as a starting point for the discussion. Participants will be encouraged to share their own thoughts and experiences on effective use of scientific literature to promote student learning.

2) Spectators or actors? How to find a balance for the students in the field during research-based education

Lead by Aleksey Shestov, Researcher AT

Where: Library meeting room

Many factors affect the behavioral scheme in the course during fieldwork: duration, budget, location, equipment used, research conducted, amount of people involved, safety issues, weather, etc. I would like to share the opinions and get feedback on how we may find the best way to choose the strategy to balance the student's role to benefit both for research and educational processes.

3) Student Workload: planning and managing expectations

Lead by Andy Hodson, Professor AG

Where: Templet

Managing student workload (and their workload expectations) is an important way of ensuring successful learning outcomes. However, there is evidence that we are not expecting the same level of engagement from one course to the next. Furthermore, we are more likely to be too generous with our contact time and so we most likely teach too much, giving our students insufficient time for reflection and reading. This session will therefore consider student workload and the tools or means we can use to manage it. The outcomes are intended to assist future course planning, to help manage curriculum drift as longer-established courses evolve and to make our lives easier by promoting self-led learning.

4) Developing and fostering independent research in a field-based geoscience course

Lead by Michael Retelle, Adjunct Professor AG

Where: van Miljen

Independent research projects in field-based and laboratory-supported courses at UNIS provide the opportunity for students to acquire and utilize skills and techniques in a unique, exciting and challenging environment. Successful achievement in courses of this type requires preparation before the course begins, along with intensive logistical preparation and advising during and

after the field work has been completed. The platform for discussion in this share session is a current UNIS field based course (AG220) that developed from a U.S. National Science Foundation sponsored program "Research Experience for Undergraduates" that ran in Linnedalen from 2003 to 2015.

5) How to evaluate the research process in course-based student research – experience with process evaluation through reflective questions

Lead by Pernille Bronken Eidesen, Associate Professor AB

Where: Skansebukta

My students write up a "Scientific report" after developing and performing a small research study along the ideas of inquiry-based learning. Earlier the final report was a typical scientific report, which was graded. However, I think the process along the way is also very important. This year I have tested a new set-up, where several appendices have been attached to the report, including a set of personal reflections. These reflective questions have been very useful both for me and the students, and their reflections really confirm my silent observations in the field. By doing this, the student gets a possibility to also look into the process, not only the final product. I have also made a suggestion for a evaluation rubric including these reflections. I will like to share my experience with this way of process evaluation.

Tuesday 1345-1445:

6) Send a question as a course repetition method

Lead by Noora Partamies, Associate Professor AGF

Where: OPS

Inspired by the UNIS SoTL course I have experimented a *Send a question type method* to replace a traditional repetition lecture at the end of the course. The students are asked to bring all their lecture notes, divided into groups of 2-3 and every group picks 1-3 course topics to deal with. The task is to make an exam question on each topic, and on something they think is essential to know and understand. Towards the end of the session each team will pose their question(s) and evaluate the answers from the rest of the class. The discussion around the questions is usually fruitful, bringing up uncertainties about the level of details they are expected to master and gaps in understanding.

7) Back to school – time to use the chalk board again?

Lead by Børge Damsgård, Professor and Department Leader AB

Where: Templet

In modern education we spend a lot of time to develop new educational tools. This is exciting and necessary, but in some cases the old chalk board may give a different approach with increasing learning outcome. We will discuss the pros and cons of chalk board teaching and give some practical example when it may be a valuable addition in higher education

8) Preparation for field based ecology studies

Lead by Lise Øvreås, Adjunct Professor AB

Where: Skansebukta

One important goal is that students graduated at UNIS have a standing reputation regarding field based studies and knowledge about organisms indigenous to the Arctic ecosystem. This goal can be reached by bringing the students forward in the field of ecological research, by actively

involving the students in the course. I therefore wanted to prepare for a more student-active learning form where students were active participants in the course, and thus had the opportunity to prepare for field and laboratory courses digitally through videos, and literature before they arrived at the field and in the laboratory. Also dataset obtained from previous years were pre-processed, so that the students could continue working actively on these during the course. I want to share my experience on this approach, and get feedback and discuss on improvement to reach the optimal method for research based education in field ecology studies.

9) The challenge of teaching multidisciplinary within environmental sciences courses

Lead by Bjørn Munro Jenssen, Adjunct Professor AT

Where: Festningen

Environmental toxicology, or ecotoxicology, is a topic/field within environmental sciences that in the intercept between chemistry and biology, and thus multidisciplinary in its nature. Although students usually have some very basic knowledge in both these fields, their in-depth competence is either in environmental chemistry or in environmental biology. This is a challenge in courses at the MSc level, where students ideally should have a good background in both these basic fields, which they often lack. In addition, there is a wide range in the students' competence within statistics. My challenge is "How to optimize teaching and learning outcome when MSc students have a diverse background in environmental sciences"? This is perhaps a challenge in other MSc-courses at UNIS due to the diverse educational background of students that follow courses at UNIS?

10) A work flow for student evaluations of field teaching

Lead by Lena Margareta Håkansson

Where: Hornsund

I will present an example of how we can evaluate the field component in our bachelor courses at UNIS based on student administered interviews. In this concept one student representative is hired from each AG bachelor course to coordinate a 3-step evaluation; 1) coordinate a written evaluation carried out by all class mates, 2) be responsible for interviews with 5-6 fellow class mates and 3) write an evaluation report. Combining these evaluations with data collected through baseline surveys and the written course evaluations administrated by UNIS, will result in a comprehensive dataset describing the baseline for the field teaching in the autumn semester our bachelor courses. Further, these results will provide crucial information for course coordinators in their work both to improve on and to better integrate the field component of our courses.

Workshops Wednesday:

All three workshops take place on Wednesday. The workshops last for two hours and are run twice (Digital tools for learning is only run one time and after lunch). Participants signs in on two workshops, one before lunch and one after lunch. In forefront of LF the participants will receive an email with a link to sign in and choose which workshops they would like to attend. Notice that the workshops might require some preparation from the participants in forefront.

1) How can we improve the student's writing?

Lead by Janet Holmén

When & Where: 10:15-12:15 and 13:30-15:30 in Templet

This workshop will focus on how to give constructive criticism. Participants will read and discuss real student manuscripts-in-progress, identifying strengths and weaknesses, giving praise and suggesting solutions as appropriate. Prospective participants are encouraged to submit students' texts for discussion. These can be manuscripts, meeting abstracts, grant applications, or posters, preferably unpublished and should be anonymous. Janet Holmén will look through them and select the most illustrative and "teachable" for use at the workshop. To prepare, she will need the texts well in advance of the Learning Forum. Please send your document (only one) to Anne.Ellingsen@unis.no no later than 7 October. Sending something in to be criticized may feel intimidating. Emphasize to your student that this is an opportunity to get valuable feedback on his or her writing and that the text will be treated anonymously in the workshop – and *please get permission* to use the text!

2) Strategies for improving teaching through collegial feedback and evaluation

Lead by Mark Furze, Associate Professor – Arctic Geology

When & Where: 10:15-12:15 in Festningen and 13:30-15:30 in OPS

How can feedback from colleagues help you improve your teaching and develop new instructional strategies? How can we use such feedback in both evaluative and reflective situations? This workshop will explore the benefits and pitfalls of collegial teaching observations and their use in classroom and field teaching.

3) Digital tools for learning

Lead by Maria Jensen, Associate Professor – Arctic Geology

When & Where: 13:30-15:30 in Festningen

In this workshop we will share the experience from the AG department in working with digital tools in teaching. We will discuss the possibilities for improving learning outcome, tracing students understanding of threshold concepts and how digital work products can be a part of the course assessment. Participants with experience in using digital tools in teaching will be asked to contribute with their knowledge and reflections on possibilities and challenges.