iEarth student organization, UiB report 2021

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ABSTRACT

Student involvement and engagement in teaching is important to ensure proper and effective feedback for development of the curriculum and improvement of teaching methods, which is strongly connected to the iEarth Progress Domain 2 "A learning environment for students". The iEarth student organization in Bergen has worked towards this by interacting with and helping students in Georakel services, introduced and encouraged contact with the institute research groups trough Publectures, and doing course evaluation in dialogue with students to engage and train students in giving relevant feedback as well as ensuring teaching quality in the chosen course.

INTRODUCTION

The iEarth student organization in Bergen have 9 active members at the end of 2021. The work is organized so individuals have certain areas of responsibility, but a joint effort is done to complete projects.

Progress domain 2 aims to create a better learning environment for students. We believe that a key aspect for reaching this goal is to engage the students themselves in a "Students as partners" concept (see e.g. Healey et al. 2014). By engaging the students and cultivating an interest in their own learning, the teaching staff can tap into the resource of continuous and relevant feedback on class activities, evaluation and connection to other courses. This will benefit both students and teachers and help create a common interest and culture for learning at the university. This learning culture and problem solving is also something the students will bring into their work-life and will thus contribute to the goals of "Geoscience for the future".

As student work in iEarth is voluntary, there have been some social activities during the year as teambuilding experiences. A good environment in the group is essential for good results in the work and makes for a natural and pleasant way to cooperate and transfer knowledge.

METHODS AND RESULTS

Georakel

Georakel is inspired by Biorakel (BioCeed, 2021), and is a service where the students in some courses can get help with assignments or in preparation for exams from teaching assistants in selected courses. This year the courses that were covered in spring: GEOV111, GEOV102, GEOV104 and GEOV109. And courses for autumn were: GEOV103, GEOV107, GEOV110, GEOV102 and GEOV113. Courses are picked after discussions with students, teaching assistants and teachers at the beginning of each semester and adapted to the needs as the semester progresses.

This service serves as an indicator for us regarding the amount of work, type of teaching and student perception of teaching in different subjects. Talking to students in this setting is one way to familiarize students with our work, and is an important arena for recruiting new members.

There is also a social aspect of Georakel where the students are encouraged to work together, both with classmates and students from other years. This helps create a good culture for learning and an environment for student collaboration.

Publectures

This year, the iEarth student organization started with publictures, a series of lectures in "informal" and "relaxed" environment. Each lecture is to introduce different research groups in the department of Earth

Sciences. There has been two publecures in the autumn 2021, where the topics were "Underneath the volcano – finding the things you were not looking for" by Christian Haug Eide and "Geoscience for the future" by Bjarte Hanninsdal. For the first lecture there were over 100 sign ups of which half participated, and on the second lecture there were around 20 participants.

There are several different research groups in the different institutes, which to a varying degree have contact with the students in and outside courses. By introducing the students to the study areas, the students can be given insight into "goals" of the academic studies. By inspiring the students, new motivation may even increase their academic performance.

There is also an aspect of connecting the students and staff on a friendly arena, which makes future cooperation easier. This lowers the threshold for students to give feedback on courses, and normalizes the conversation/discussion on teaching.

Career day

The career day is a gathering where representatives from different companies and organizations, who have studied at UiB, present themselves and their workplace. What they do, transitioning from being a student to working, recommendations etc. are presented, and students can ask questions and talk to the representatives.

The purpose of this is to strengthen the ties between academic studies and the industry, and to motivate the students in their studies. It's a natural environment for networking and for students to find out what possibilities they have after studies.

The career day was planned to be physical, but corona hindered that, so the arrangement had to be digital. Thus, the booking of premises and a dinner for the representatives had to be cancelled. There were around 50 students participating, and they got to interact with a variety of industry representatives.

Subject evaluation

Subject evaluations by iEarth in Bergen have been done by conducting discussions between iEarth students and groups of 5-7 students. The guidelines of these discussions are a set of questions put together in cooperation with students and staff, but the students can talk about what they feel is important. These discussions are valuable since the students often have a lot more opinions and experiences than are written down on the standard evaluations. This can lead the student to realize they have a lot to contribute in discussions regarding teaching, and thus prepare them to give feedback directly to the teacher. The iEarth students conducting the evaluation are in different stages of their education, and experiences can be shared, and knowledge can be transferred during evaluations.

The notes from the discussions are combined into a report and given to the subject responsible to be used to improve the subject. By covering the same subjects over several years, progress can be mapped and data on teaching is collected.

Until now there has been subject evaluations once in the courses GEOV111, GEOV102, GEOV300, GEOV326 and GEOV302. The geohazards course (GEOV217) has been evaluated twice, and progressions and challenges in this specific course have been identified, so now extra work can be put into the challenging areas. These evaluations have been done under varying corona measures, and we found that physical discussions were vital for good feedback, especially with younger students.

Team building

Each semester the iEarth student organization is planning activities for team building. It is essential for building a good work environment and increasing teamwork efficiency. Each year there will changes to

the team, which can cause unbalance. Team building activities are a way to welcome new members to the team, create bonds between members and help to figure out group work dynamics. Members of iEarth are often strangers to each other, team building can help to get to know each other in a fun way and further improve communication skills.

For organization to be able to proceed with same work amount, each year a core group is created where responsibilities are divided between members to ensure that the workload will not be too high for some members. Currently, the tasks are divided as follows: management, responsible for Georakel, responsible for subject related events, responsible for social aspects of the group, responsible for economics and board members.

Table 1. Expenses, spring 2021

Date	Description	Category	Expenses (NOK)
01.01.2021-01.06.2021	Salary	Georakel	12258
23.01.2021	Dinner	Team building	3000
12.04.2021	iEarth sweaters	Merchandise	2990
03.05.2021	Pizza	Meeting	900
Total			19148

Table 2. Expenses, autumn 2021

Date	Description	Category	Expenses (NOK)
31.08.2021	Pizza	Meeting	900
14.09.2021	"Fangene på Fortet"	Team building	3150
19.10.2021	Pizza	Publecture	4437
19.10.2021	Gift card	Publecture	400
22.11.2021	Gift card	Publecture	400
22.11.2021	Drink coupons	Publecture	300
22.11.2021	Snacks	Publecture	95
01.09.2021-31.12.2021	Salary	Georakel	4940
19.10.2021	Food	Georakel	240
19.11.2021	"Julebord"	Team Building	4000
Total			18862

DISCUSSION

This year we have worked towards our goals through the challenges of corona restrictions, and are happy with what we have achieved. The career day was a success digitally, georakel sessions were available for those who needed them, subject evaluations were conducted, and we started up with publicatures in the autumn of 2021. All of this while creating a good environment for our student representatives.

Because of the restrictions we had to find alternative digital solutions to our physical arrangements. There was a higher threshold for student interaction over a digital platform both in georakel, student evaluations and in the career day. We link this to the fact that you are in a spotlight when speaking in a zoom/teams call, and the anonymity with sending a message is less fulfilling than a personal conversation. This enhances our perception that having physical arenas for student interaction is indispensable and should be focused on. However, we did find that digital preparation material on the career day was very helpful. Here the students could watch a short video the industry representatives made to introduce themselves. This gave students time to prepare themselves for the career day. The

videos were made available some time in advance so the students could watch them when they had the time. This tactic is something we will consider even if the career day is physical, as it also is an offer for those who cannot attend.

Career day was digital because of Covid-19 outbreak and therefore we did not have any cost related to it. Even though the event was digital, students were interacting by asking questions to the presenters. iEarth students played a key role in keeping the conversation alive, but this could be due to the arrangement being digital. For that reason, we are hoping to organize a physical career day where it will be more natural for all to participate in a conversation. Physical career day will result in bigger spending and more organizing for iEarth students. We are hoping to get as many alumni as possible to get involved in our career day as it could further improve relations between institute and alumni.

We have found that our project of specialized subject evaluation is labor intensive and should be used to track chosen subjects over a longer period. New projects regarding a more student based subject evaluation are tried out in Oslo, and Bergen might follow. We do, however, recognize the strength of following one subject closely as this serves as good training for us and the students. Teachers in the chosen subjects also get a report and can further discuss with us how to improve as we are not bound by being participants of the subject itself. There are currently no expenses with evaluations, besides coffee being served during interviews.

The publectures were a success and served as a meeting place for students across the Earth Sciences and are expected to inspire and help create a good environment between all students as well as the staff. Publecture has also helped us to recruit members and increase general knowledge about iEarth among students. At our first publecture there were most participants, which can be due to complimentary pizza being served and Covid-19 restrictions being waved recently. The second lecture had less participants, which could have been due to the date being close to the exams period. Offering refreshments with the first lecture also seemed to result in higher participation. Therefore, in the future we will consider having pizza on special occasions. Both lectures were a success, because they had open question sessions and mingling afterwards. Students have shown interest in future publectures and therefore we are planning to continue with them in the year 2022. We are expecting more lectures in the spring semester because it is longer than the autumn semester.

Georakel is one of the main events planned by iEarth student organization each year. There seems to be a big need for it, based on all the positive feedback we have gotten from both students and faculty. Each session there has been students participating by asking subject related questions and discussing answers to their papers with co-students. We believe Georakel to have much impact on students' learning process, but we are looking into ways to improve it further. For that reason, we are currently working on a better feedback system. That could give us insight into what students believe to be working, but also to find out what might be missing. It is most important to cover relevant subjects in Georakel to keep students interested and participating. By applying a feedback system, we can pin down such subjects. In case we find out that we must increase the amount of subjects offered, it will also increase expenses. Expenses for Georakel are linked to salary for the student assistants (Table 1 and 2), therefor an expanding number of subjects will increase total costs. We believe such extra cost to be a necessity for Georakel to stay relevant for students and further improving the study environment.

We have planned various team building evens such as dinners and visit to "Fangene på Fortet" and participating at Geolearning Forum. Team members have enjoyed such activities and we are planning to continue to organize and participate on them. Members have specially liked more physical activities such as "Fangene på Fortet" (Table 2). This has inspired us to have more active types of team building events, for example cabin trips. Meeting can also be social and team building, but first and foremost

they are meant for planning and organizing events. Being a member of this organization is voluntary and in addition to studies. Meeting can stretch out, require teamwork and good team dynamics. To make meetings more productive there have been refreshments (Table 1). In the future we are planning to do so for each meeting.

It has come to our attention that there is little knowledge among geology students at UiB about iEarth and what it is the iEarth student organization does. Such questions are often asked of members on various events they organize. To make iEarth more visible inside the university we bought sweaters with the iEarh logo (Table 1). These are to be used at different events that members organize and participate in. To further increase the visibility of iEarth inside UiB we plan to make a stand. There information can be distributed, and feedback can be collected. Feedback can be analysed to improve our events and to organize new ones. In addition, it is an opportunity to recruit new members.

SUMMARY

The iEarth student organization in Bergen has planned various events throughout the year 2020 to create a better learning environment for geology students. In the year 2020 such work was especially important because of the effect Covid-19 restrictions had on the study environment. In general, events were meant to "break the ice" between students, improve and support student collaboration, motivate students, give students insights about research groups in the Earth Sciences and get students acquainted with different relevant industries. Through our activities we have experienced an increased interest in teaching from the students.

REFERENCES

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