Green Impact 2020

Group: Competency building for staff at Maastricht University

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The Competency Building for Staff Green Impact group took a two-pronged approach to this project – one focusing on the needs and wishes of UM staff in order to focus and shape future trainings so as to best educate, whilst the other focused on finding a concrete and practical solution to the large and underexposed problem of plastic wastes in our laboratories and educating staff along the way to better manage these wastes.

**Part I: Questionnaire**

The first part of our Green Impact initiative consisted of a questionnaire targeted at all UM staff. Our aim was to assess the current availability of and demand for sustainability competency building trainings among UM staff members.

We explored the competency building trainings currently on offer at the Staff Career Centre, UM Library and external institutes. Simultaneously, we designed a questionnaire to determine the perceived need and wish for these trainings within Maastricht University. This questionnaire is currently being circulated to determine UM staff’s demand for sustainability competency building trainings and what their preferred topics and formats would be when receiving a training on sustainability competency building. By sending out this questionnaire, we also hope to raise awareness on the importance of sustainability competency building among UM staff. According to the explored possibilities within the UM network to provide sustainability competency building trainings and according to the findings of the questionnaire, we aim to write a future plan for offering and promoting sustainability competency building trainings to UM staff. Amongst future ideas that we had in mind: workshops, online lecture or video clips to reach all staff members and students, possibility to offer consulting to discuss the needs of specific research groups and adapt the actions towards these needs.

To explore the availability of sustainability competency building trainings offered to UM staff members, we met with Katinka Bastin from the Staff Career Center (SSC) and Jaro Pichel from the library and EDLAB. From Katinka’s presentation it seems that the SCC Human Resources trainings mostly focus on sustainable employability, including continuous professional learning. The UM SCC offers 3 ways of support: coaching, education/training and team development. Currently there are no trainings on ‘Green-Impact’-sustainability being offered from the UM Staff Career Centre, however, the SCC would like to integrate sustainability into all existing trainings as of 2021. The concern for a specific sustainability-related training is that barely any UM staff members would be interested to participate. The training needs to sound very attractive and include benefits for the individual participants to make people register. Further ideas that have been discussed are providing team-trainings per faculty, increased home-office working and virtual meetings and circular economy elements in daily life. We also discussed that future investments should be focused on improving accessibility to connect; inviting (motivational) guest speakers to inspire and share practices; and enhancing informal learning by giving space, time, resources and trust. The questionnaire will continue framing the demand and preferences...
of UM staff on sustainability competency trainings. The results of the questionnaire will be shared with Katinka.

Furthermore, we met with Jaro Pichel to discuss the meaning of competence development in general and competence development support offered by the University Library and by EDLAB, an institute for education innovation. Jaro stated that competence development starts with curiosity, interest and connections within a network: “Most learning happens informally and outside of the job, which is why we should aim to connect the informal to the formal (professional) world by a a community-based learning approach. Thereby we foster intrinsic learning out of shared interest by creating a culture of learning in informal networks.” The UM library currently hosts learning management and workshops (e.g. on critical thinking, critical source selection, etc.) and supports Canvas as main learning system for teaching. ([https://learn.canvas.net/login/canvas](https://learn.canvas.net/login/canvas)). The EDLAB aims to connect faculties on a project-basis (at least 4 faculties per project) to overarch the faculties at UM. They want to move from a workshop-based approach to a more informal education system (e.g. lunch lecture, reading circle, etc.). UM students and staff members can share new initiatives with EDLAB at any time. During the meeting we found that the SCC’s aims and Jaro’s vision are very similar.

To explore the demand and preferences for a training on sustainability competency building, we created a questionnaire for UM staff members by using the Qualtrics Software. The questionnaire has been written in both Dutch and English and includes questions on background information of participants, previously offered and followed sustainability trainings, current demand for sustainability trainings, preferred training topic(s), preferred training format(s), current ideas for sustainable practices within their working environment and optional additional comments. The questionnaire was published on the 10th of June, 2020, in UM news and is now being circulated amongst UM staff.

The information from the discussion with Katinka and Jaro and the findings of the questionnaire have been combined in a written protocol for a practical implementation and promotion of future sustainable competency building trainings for UM staff members and further research needed to provide desired and effective sustainable competency building among UM staff members.

**To do:**
- Promote the survey to co-workers to increase response rate
- Analyze the data and identify the needs and willingness of the staff to integrate more green initiative in the work environment

**Part II: Zero Waste Lab**
**Overview, cycle, contact persons**

In the ‘Zero Waste Lab’ - part of our initiative, we aim at improving awareness; and reducing and managing plastic lab waste. In order to achieve this goal, we will try to increase the recycling of lab waste, while collaborating with external partners. The ultimate goal is to create products (i.e. with the help of Precious Plastic Maastricht) from the collected plastic waste that, in turn, can be used by Maastricht University, introducing a sustainable life cycle of plastic used in labs at the university. The products can range from small clips up to chairs – which could populate the outside environment of the University for instance, or even artwork. We think that close collaboration with local organization, and receiving products in return, might increase awareness even more.

**II.a) Plastic Gloves:**

Plastic gloves make up the majority of lab waste at our labs such as MERLIN or M4i at the UM. However, the gloves are usually the least contaminated waste in the labs since most gloves are only indirectly contaminated, if at all. Reducing the number of gloves used is not possible due to safety regulations. This means there will be a constant supply of plastics and makes it even more relevant and feasible to recycle them. Currently, the plastic gloves are collected and destroyed. The gloves are made of soft plastic and, therefore, are not suitable for every recycling program. However, there are existing
programs that allow recycling of these gloves, such as RightCycle® and Teracycle®. Many universities are already recycling their glove waste through these recycling companies. The RightCycle® program (Kimberley-Clark) currently works with 300 facilities to divert 450 tons of gloves per year.

We contacted recycling companies such as RightCycle®, Teracycle® and local organizations such as Precious Plastic Maastricht in order to learn how and where the collected plastic waste could be recycled.

One critical point that came out from our investigations: Precious Plastic can only recycle so far a certain type of hard plastics, and not gloves. Therefore we extended our project to the recycling of hard plastics.

**Action to take for the recycling of gloves:** check with the purchasing department the names of the companies

**II.b) Hard plastic lab waste:**
Because sustainability implies different way of consumption and collaborating, our prime priority was to seek for local solution to recycle our lab waste. Therefore, Precious Plastic seemed to be the ideal partner to team up with on this project.

Precious Plastic is a local student-run organization that is part of the larger ‘Precious Plastic’ founded in 2013 in Eindhoven for recycling of single use plastics at a large scale. Precious Plastic Maastricht has a workspace at the Werkhuis with a shredder and extruder which can process hard plastics. It is already collaborating with Tapijn to expand with more machinery so that more types of plastics can be recycled and more products can be made from this recycled plastic. They are open to collaboration and discussion as to what the possibilities are, depending on the level or funding and notoriety from Maastricht University.

Moreover, representative of the Precious Plastic Maastricht Team joined our meetings and explained which types of plastic (hard plastic waste; PET, HDPE, PP, PE) could be re-used by them. See the pictures below:
Then, we started in March a pilot study to start collecting lab wastes in two test places: MERLN and M4I institutes. For this purpose, we contacted few lab managers across the University of Maastricht, give to them and their group members a short presentation on our goals and after their agreement, started to collect uncontaminated lab waste. We collected uncontaminated hard (i.e. empty pipette tip boxes or ethanol bottles) and soft plastic (i.e. gloves) and already started a test-trial starting the 03-03-2020 as a proof of concept to see how much waste we can collect in a period of 2 weeks. We organized a Team meeting and went to the labs to see the special 'Zero Waste Lab' bins set up for our project, which you can also see in the pictures below. However, due to the spread of COVID-19, collecting waste and trying to find ways of recycling it has become difficult, as the majority of labs are closed.

In addition, Precious plastic is not able to collect our waste collected so far so we cannot have our wastes processed for the pilot study.

**Actions to take:**
- Continue sampling the waste through the summer until Precious plastic is allowed to collect the plastic again (probably after the summer)
- Arrange the collection of gloves
- Arrange the collection of pipette tips with FS
- Write protocols with CRISP to make sure that the contamination issue is handled and that we comply with safety regulations
**Contacts:**
RightCycle®
Teracycle®
Precious Plastic Maastricht: Ezekiel Stevens, preciousplasticmaastricht@gmail.com
Brigitte Marchal: Contract Management Officer Purchasing, ADVB & Purchasing, Facility Services

**Overall goal:**
**Part I:**
- Increasing awareness for the need of sustainability competency building among UM staff
- Assessing the current availability of sustainability competency building for UM staff
- Assessing the demand for sustainability competency building among UM staff
- Determining UM staff’s preferences in topics and formats they would want to receive a training on sustainability competency building.
- Writing a future plan for offering and promoting sustainability competency building trainings to UM staff
- Provide consulting to the different laboratories to advice on their ways of managing lab wastes and seeking together for appropriate solutions

Part II:
- Reducing (plastic) lab waste in UM labs.
- Better management of lab wastes by organizing collection of gloves, pipettes tips by the manufacturers
- Locally recycling the collected plastic waste and creating something of use for the UM and staff members, thereby increasing awareness for sustainability
- Introducing a sustainable life cycle of plastic used in labs at the university
- Supporting local businesses and increasing name recognition
- Increasing Green Impact of Maastricht University, and decreasing the ecological footprint
- Serving as a role model for other universities; and team-up with the other Universities to increase the impact of our action