

Creating better work placements by understanding mentor challenges

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ABSTRACT:

The project DEVELOP - Developing evidence-based mentoring for better STEM (i.e., science, technology, engineering, and math) work placements – focuses on the work placement *mentor/host* to develop a series of online modules to assist in mentoring students in university practise courses. Although several studies focus on student perceptions and needs during work-placement experiences, here has been little prior research on the host experience with student mentoring in discipline-based higher education work-placement. Through three focus group interviews with work placement mentors (*hosts*), we have learned more about the mentorship experience and the needs of the hosts and host companies.

KEYWORDS: Work placement, Practice courses, Work relevance, Skills training, Mentoring

BACKGROUND

Higher education in Norway is increasingly implementing work placements as part of a formal curriculum (Costley, 2011; Kennedy et al., 2015; Velle et al., 2017). There are several benefits from including work placements in higher education, such as increased skills training (Parker & Morris, 2016), enhanced motivation (Gardner & Belland, 2012; Kyndt et al., 2011) and enhanced understanding of future careers and occupations (Matthew et al., 2012). However, information on mentoring is largely lacking in both academia and discipline-based work placements with most of the research focusing on mentoring students in research rather than in career placement and professional development (Limeri et al., 2019; Tuma et al., 2021).

Students have varied experiences during work placements in professional education in Norway (Helseth et al., 2020). In these situations, both subject competence and mentoring competence of the supervisors, or *hosts*, are key to achieve learning outcomes. However, students often comment that the hosts lack mentoring competence (Helseth et al., 2020) and that the quality of mentoring varies considerably among hosts (Hegerstøm, 2020; Wiggen, 2014; Wiggen 2019). Further, there is little reason to think that mentoring competence is not important in work placements or that all hosts are skillful mentors. In an interview with hosts, none had undergone mentoring education and they also lacked knowledge on how to educate themselves to become effective mentors (Kristiansen & Wiggen, 2020).

DEVELOP is a three-year program, involving collaborators from the Institute of Marine Research, NORCE, the University of Bergen (UiB), the University of Oslo (UiO), the University of Tromsø (UiT), the University of Minnesota (UMN) in the US, and two Centres for Excellence in Education—iEarth and bioCEED. DEVELOP focuses on work-placement *mentors* (or *hosts*), with the objective to positively impact the work-placement experience for students, hosts and higher-education institutions. We report here on findings from a series of focus groups with work-placement hosts associated with three programs at UiB, UiT, and UiO. Specifically, we conducted one-hour discussions in Bergen, Tromsø, and Oslo, asking participants questions such as “can you share your experience with being a praxis host and having student interns?”, and “what has worked well and why?” Our aim with these focus groups was to identify areas where hosts could benefit from some mentoring guidance, and to construct online modules to provide this guidance.

METHODS

During spring and fall of 2022, three focus-group interviews were conducted in three different campus cities in Norway. All participants in the focus group interviews were recruited because of their experience as mentors in work placement courses.

The goals for the interviews were two-fold: they were designed to (a) provide information for the ongoing project on developing online modules (or tutorials) for workplace hosts, and to (b) add to existing knowledge about work placement mentorship—especially related to host challenges and mentor-training needs.

All interviews were based on an interview guide developed by the research team. All questions were open-ended, and the interviews were semi-structured, and conducted as focus-group interviews. This format allowed each group member to comment on the input of others, and for the interviews to proceed like an informal conversation, thus the interviewer takes on the role of a moderator (Kvale and Brinkman 2009).

Our interview guide included these questions:

- Share your general experience as a workplace host. What do you have your student interns do when they work with you?
- Can you share what you think has worked well?
- What could be better, for you, about this experience? Can you identify specific challenges to you, in being a supervisor for a student intern?
- Complete this sentence: one thing that would help me be a better supervisor is....

Typical follow-up questions included prompts such as “do the rest of you agree with this sentiment?” or “does this experience match your own?” For each focus group, sound was recorded, and interviews were transcribed by two student researchers. Transcribers removed all personal identifiers (including names of the hosts’ companies) prior to analysis.

The study protocol, including the information and consent form, was notified to RETTE (the system for risk and compliance for the processing of personal data in research and student projects at UiB).

We used inductive coding to categorize host responses and group these categories (Table 1) into broader themes. For example, some host comments were categorized as “rewarding student experience,” (“we always worry that it’s maybe not rewarding enough for the student, like it’s training.”). Others expressed the need to know more about student skills prior to the praxis to better plan for the praxis experience.

RESULTS AND DISCUSSION

Three focus group interviews provide the data that is currently being analyzed. We have established an initial codebook, and we provide these codes and example quotes in Table 1. We find that there are different needs that can be addressed, such as practical tools to structure the daily activities of the work-placement (“I think we can do better, and have more structure for "when you are here"”) and routines for feedback (“It would have been nice with some general feedback from the university, not literally what the students say, but some feedback”) as well as the need for accessible pedagogical tutorials aimed at this group in particular (“Some of our researchers might not have a pedagogical background, so, it might not be that they necessarily know how to supervise students very well”).

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TABLE 1		
Theme	Category	Example quotes
Practical challenges addressed by the hosts	Availability of workspace for students	We do not have an office for [the students], so we made a meeting room available. This is not ideal, and we would like to change this
	Course structure limiting projects	Our field work isn't going year-round, so that means the timings [of the course] sometimes don't line up very well. (...) autumn is usually quite quiet, so [the student] ended up doing a lot of lab work rather than field work
	Concern about contact person for student	The contact person isn't necessarily the person who has the most contact with them [is not the one supervising]
		... but we're always maybe a little bit worried that like, if there was ever a problem, then the correct contact person may not be the <i>right</i> contact person
Information flow	Information about student skills or background	I wish I knew more about the students' background
	Early communication between students and hosts	Meet the student beforehand, to know a little bit about what they can do, and also so we can tell a little bit about us, not just in writing (...)
	Physical meeting with the students	Maybe there could be a meeting where all the students and all the hosts could have met?
	Feedback from students to hosts	It would have been nice with some general feedback from the university, not literally what the students say, but some feedback [about the student experience]
General concerns and observations	Concern about repetitive work	We worry that maybe the training is a little bit too repetitive, that they'll spend their entire 150 hours sort of doing the same [thing]
	Concerns about rewarding experience	We always worry that that's maybe not rewarding enough for the student
	Identifying good projects for students	We meet the students by asking them what their interests are within their education. If we can get them motivated and engaged, there is a lot we can work with.
	Structuring the student practice	So there I think we can do better, and have more structure for "when you are here", "how many hours have you worked", and then, you know, let it be up to the student.
	Host skills required to train students	Some of our researchers might not have a pedagogical background, so, it might not be that they necessarily know how to supervise students very well

On a general note, participants have expressed interest in sharing experiences, and they expressed that they valued sharing experiences with other hosts. Thus, the format of the focus group interview proved to be useful both for the practical aspect of data gathering, and also for encouraging communication between the hosts. All groups were interested in tools to make them better mentors, providing us with examples of what they thought could be useful for them.

Initially we were concerned to ask for too much of the participants' time, but they all expressed that they wanted to participate because they find this work as mentors to be important, and they want to give the students a good learning opportunity. Many said that they are concerned about giving the students real life learning activities and providing them with a diversity of practical experiences.

Future DEVELOP work will focus on developing training modules for these and future hosts, and then evaluating these modules prior to broader dissemination. Further, we see a need to develop our language on talking about mentorship in these discipline-based work-placements in higher education. We have experience with developing student practice courses in STEM education (see example Velle 2017). However, we tend to use several words to describe the role of the contact person in the work placement, such as host, mentor, supervisor, and work-placement teacher. We also see that the hosts use several words to describe themselves. Could this also be a reflection of the role, with multiple interpretations? Establishing a consensus language for these hosts will help future collaborative efforts to understand, support, and improve the role of these critical individuals in our students' educations.

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