Symposium: Multimodal app-based Mentoring in Music Teacher Training

Symposium presentation 1:

Implemination of an app-based mentoring praxis – Intruduction to project MoVeM

Jens Knigge (Nord University)

The main objective of project MoVeM is to implement and evaluate a digital mentoring technology (the MOSO app) to develop and stimulate quality improvement of mentoring practices at Nord University's music teacher training (and potentially at similar other institutions in Norway). The central features of the MOSO app can be summarized as follows:[1]

- *Workspace*: «MOSO Workspace brings teams together and provides spaces to interact during the practice period and within theoretical courses. MOSO Workspace is a digital work space outfitted with collaboration and communication features. MOSO workspace can act as the collaborative hub for student teams and teachers that don't have the ability to meet inperson daily.»
- *Planning*: "MOSO is used to integrate planning, observation and guidance on a secure digital platform. The collaboration in the practice group starts even before the teaching. Each plan for the practice teaching is prepared in MOSO and shared with fellow students and practice teachers for feedback and quality assurance.
- *Multi modal feedback*: «The teaching is observed and feedback comes multi modally through text, image and video with tagging functions. Feedback is shared in real time and is clearly arranged in chronological order. The goal is to use the observation for reflection and guidance.»
- *Supervision*: «In the supervision, you use text, image and video as a starting point for conversation and reflection. With MOSO, you have gathered all the plans and feedback in one place. This can be used as a basis for guidance, to keep track of your teaching and development.» (MOSO, 2022)

Why is there a need for an app-based mentoring approach?

Heterogeneity in practice phases for our music students is high. This includes practice in different schools (primary, lower/upper secondary), schools of music and performing arts ("kulturskole") and project practice within music projects in society. A special need music students have, is the supervision of practical (i.e. artistic) preparation, observation and reflection. Traditional practice mentoring (verbal/written) appears in this context as insufficient, and MoVeM therefore focuses on multimodal approaches, which may provide a richer approach to the non-verbal that occurs in music education. In the light of the MoVeM project, we see a need to introduce a similar multimodal mentoring technology and thus to raise the digital competence of university staff and partners from the practice field.

The implementation (see further details below; presentation 3) of a MOSO-based mentoring approach is planned for students and teachers affiliated to three cohorts at the music teacher training at Nord University, who follow the project for four semesters (autumn 2021 until summer 2023). The implementation follows the structure of the study programs related to different practice arenas (primary/secondary school, school of music and performing art, and project practice). MoVeM therefore consists of teachers/mentors in the respective schools/institutions, music students and university teachers.

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[1] See also introduction video on MOSO's webpage: https://moso.as/wp-content/uploads/2021/09/This-is-MOSO-HD_720-WEB-H264_2500.mp4

The first presentation of the symposium will introduce both the research question and the individual components of the MoVeM project. This will also include a contextualisation within the current state of research (e.g., Mathisen & Bjørndal, 2016; Wennergren et al., 2018).

Symposium presentation 2:

Teacher's and mentors reflections on the implementation of MOSO in music teacher education

Laila Grendahl (Nord University), Tony Matthisen (Stjørdal municipality), Klara Vik Aarmo (Inderøy municipality), Rasmus Seloter (Levanger municipality) & Maria Stattin (Inderøy municipality)

MoVeM's work package 2 has had the main task of implementing MOSO in the various practice periods. We started this work by gathering all the mentors involved from primary, secondary and cultural schools for several joint workshops. Together we discussed the questions: *How does mentoring take place at different schools today? What subject-specific aspects of the supervision do we see? How can MOSO support guidance in our contexts?*

By exchanging individual experiences and the uniqueness of different school types, we built a kind of professional community across the institutions. Here, the basic model for supervision that the app is built around was established as a template for how the supervision cycle should take place in practice. Furthermore, workshops regarding the use of MOSO were conducted with the mentors and a limited selection of student groups. MOSO was then tested at our cooperating schools.

The second presentation will reflect on preliminary findings that show a mixed user's experience where the app itself is considered to have potential and relevance, but that its design is not entirely optimal for a complex music educational context. The project group had expected more use of multimodality in planning and observation, especially where practical musical performance was in focus. This did not happen, and neither was the app used as a communication link between students and university teachers as we had imagined. Hence, the presentation's main queestion will be: What are the reasons for the resistance/reluctance regarding the usage of MOSO?

Symposium presentation 3:

What works and what doesn't – preliminary findings from MoVeM's evaluation study

Ola Buan Øien, Jens Knigge, Solveig Salthammer Kolaas & Ola Marius Ryan (Nord University)

Connected to the implementation of MOSO, a research team is conducting a comprehensive formative and summative evaluation study to examine the use and (technological and didactical) implications of such an app-based mentoring approach.

The MoVeM project is of an exploratory nature, since new ways of practice mentoring will be investigated in a music teacher education context. The main goal of the evaluation study is therefore to better understand the involved processes, to discover mechanisms of action and to determine the effects generated by MoVeM. On the one hand, this means that the evaluation study must have a formative and exploratory character. "Formative" means that "the implementation of the intervention and its effects are continuously monitored" and "interim results are regularly provided with a view to modifying and improving the ongoing intervention" (Bortz & Döring, 2006, pp. 109–110; trans. authors). This allows a continuous monitoring of the implementation, of the underlying concepts and their mechanisms in practice and, based on this, the identification of potentials for optimisation. On the other hand, evaluation of intervention effects requires a summative approach "that evaluates the overall effectiveness of an intervention" (Bortz & Döring, 2006, p. 110; trans. authors). The combination of formative and summative perspectives necessarily requires

different research methods (i.e. qualitative and quantitative methods). The evaluation study therefore follows a multi-methods approach.

The MoVeM evaluation study is systematically linked to the further development of the implementation. For this purpose, we use the methodology "design-based-research" (pedagogical design research) as a framework (Bjørndal, 2013; Plomp & Nieveen, 2013). Pedagogical design research "is systematic research linked to processes around the development, testing and evaluation of teaching and training programs, where the aim is to optimize pedagogical approaches that can provide better teaching and learning. A particular characteristic of design research is that new knowledge is created in collaboration between practitioners [...] and researchers" (Bjørndal, 2013, p. 245) and in confrontation with practical situations where new methods/models (= pedagogical design) are tested. The goal is to improve the design and the theory the design is based on. Pedagogical design research thus contributes both to the development of pedagogical practice and pedagogical theory. An important characteristic of design research is its cyclical approach: pedagogical design (intervention) is implemented, evaluated and revised (cycle I). Subsequently, cycle II begins with a revised design which is again implemented and evaluated, etc. MoVeM uses two cycles, with each cycle comprising two semesters/practice periods (Fig. 1).
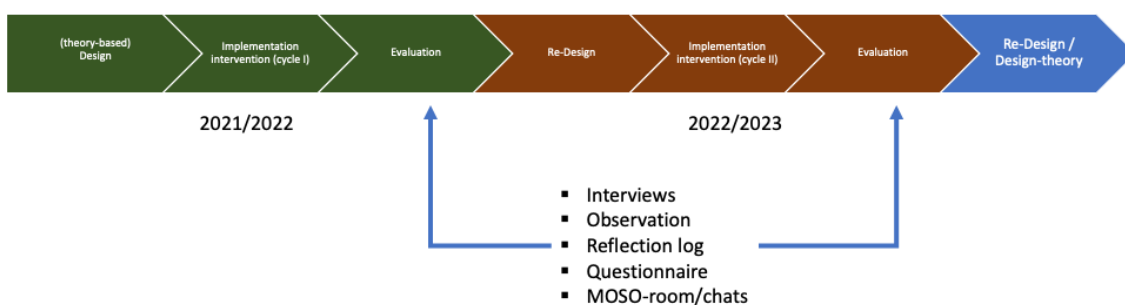

Figure 1. MoVeM's cyclic design-evaluation-redesign structure

The third presentation of the symposium will present preliminary results from cycle I and II.

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