

Supplementary material Intervention

Development of the intervention

Video Feedback Coaching for teachers (VFCT) is an approach to coaching, which was used in science & technology education in primary schools to enhance teacher-student interaction. This approach was translated to the domain of music education, piloted in two schools, and adapted after each pilot. Similarly to the original VFCT intervention for science & technology, in the VFCT intervention for music education attention was paid to both the verbal and non-verbal aspects of autonomy-supportive stimulation of exploration, discovery and performance by students.

The coaching was developed in close collaboration with the co-authors, in a team of researchers and teachers including experts in (music) teacher training, and with an educational expert outside this team, who was educated at the conservatoire, and is still active in music teacher training. Coaching was carried out by this expert and the first author, who is trained as a teacher, and is active as a teacher-researcher at a conservatoire. The expert was involved as a coach in the pilots and in the first year of the VFCT-intervention. During the first pilot the two coaches attended each other's coaching sessions. The first author was involved as a coach in the entire intervention period, spanning from the pilots till the end of the second year of the VFCT-intervention.

Content of the introduction session and coaching process

- The coaching trajectory was preceded by an introduction session at the primary school of the participants. The session was led by the first author and the educational expert in music teaching. In this session information was given about creative autonomy support and development of musical creativity in terms of divergent and convergent thought and action. The three music-pedagogical strategies (see article section Present study and content of the intervention) were introduced and were practiced in a musical setting with creative tasks during the session. At the end of the session the participants received a workbook that was used during the coaching trajectory. The workbook contained theoretical information about the principles of creative autonomy support and development of musical creativity and the pedagogical strategies as well as space for formulating learning goals and writing down reflections.
- Process orientation: In the introduction session, in the workbook and in the coaching sessions the focus was on the creative process enacted in teacher-student interaction.
- After the introduction session four weekly lessons were given by the participating teachers. The lessons were recorded, and the recordings were used for coaching. Coaching sessions took place after school the same day lessons were given. The coach selected fragments from the recording. Because teacher and coach viewed and reflected in-depth on teacher utterances and actions and on the subsequent verbal and musical expressions by students, only a few fragments (4 to 5 max.) were selected.
- The focus was mainly on positive and empowering fragments (proportion of 3 out of 4 fragments) in which teachers offered creative autonomy support effectively, which was also clearly visible in the subsequent creative student expression.
- During the coaching, the coach invited the teachers to reflect on the situation and interactions in the selected fragments without giving feedback straight away. An important point of departure was to approach the participating teachers as talented learners with their own musical learning biography.

- To avoid taking the expert position, the coach tried to find an appropriate balance between giving information and instructions on the one hand and inviting teachers to discover and share their observations and reflections on the other.
- The teachers formulated learning goals at the end of each coaching session and used the observations and reflections discussed in the coaching session as input for the next music lesson(s). Learning goals were formulated within the framework of the content of the intervention. Goals targeting knowledge about musical content, music theory or instrumental knowledge etc. were not addressed within this framework.
- The introduction session, the workbook as well as the interaction in the coaching sessions was aimed at both verbal and non-verbal teacher expression. Using video examples of teachers' own music teaching, teacher and coach jointly looked for the ingredients of creative autonomy supportive teaching and reflected on what this brings about in terms of (musical) student expressions.

Verbal teacher expression such as giving instructions and directions (instructing), providing information (explaining and informing) and different ways of asking questions and prompting to continue (questioning and encouraging) were addressed. Taking the reflection one step further than discussing the difference between open and closed questions, the coaching focused on the differences between, and nuances in check questions and suggestive questions implying an 'appropriate' reaction, and stimulating questions and encouragements that invite exploration and risk taking in musical action by students.

The non-verbal aspects of offering creative autonomy support were addressed by looking at how teachers used their bodies during music teaching, both deliberately and without being aware, in the recordings. The teacher's gesturing to clarify musical concepts or to support creative musical exploration was examined in the video fragments, as well as teachers' use of 'modeling' as a pedagogical strategy and its potential to elicit imitation by students.

Related to this, the importance of observation, the timing of modeling, of offering participative support by playing along, and of intervening in general, when students are actively exploring, was also addressed, as well as posture, bodily movement, and facial expression. Teachers reflected with their coaches on the non-verbal aspects of their music teaching in relation to the degree of stimulation of the autonomy in their students as well as in relation to musical exploration and creation.

- During the coaching sessions, the coach stressed the importance of exploration of the pedagogical strategies during music teaching, focusing on the learning goal formulated for the different coaching sessions, and without paying too much attention to all aspects addressed in the intervention simultaneously. Related to this, the relevance of making mistakes for accumulating mastery experiences and for development of their music teaching skills was discussed to stimulate teachers' faith in the idea that development of the targeted skills would come about through the interplay between exploration, experience, observation, reflection and coaching.
- During the fourth and last coaching session the teacher and coach informally evaluated the developmental trajectory teachers went through. Teachers regularly brought up that it had opened their eyes with regard to stimulation of (musical) creativity, and that they experienced the intervention as a an empowering and enriching, yet quite labor-intensive process, but that they had also enjoyed it. Teachers also mentioned that students were engaged and liked the music lessons. Some teachers hadn't taught music quite some time before the intervention and said they felt more motivated to teach music after the coaching. Working with their own video material from music lessons in coaching sessions which took

place the same day, was mentioned as a strength, in addition to the detailed way of looking at interaction in the recordings and receiving new knowledge about (musical) creativity.