

## Problem-based Learning: Composing in the classroom as a challenge for learning music

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### Theoretical background or Context

Write the text here: The challenges posed by contemporary society have amplified the issue of learning by placing it at the center of educational and political discourses. The development of autonomy, critical and creative thinking, research and cooperation skills, curiosity, learning to learn, all connected with debates born in the cognitive and sociocognitive psychology of Piaget, Bruner, Vigotsky and Bandura and in the ideas of the *active school* promoted by Dewey, not only configures guiding principles of curricular and ministerial discourses (e.g. *aprendizagens essenciais*), but also requires alternative and complementary models to the expositive, imitative and direct instruction. Problem-based Learning (PBL) is one of the possible paths. Although its study brings together scientific literature, the application to music education is far from being consolidated, particularly regarding the reflection, design and empirical treatment of action plans in line both with curricular purposes and ideals. Here, we propose possibilities to learn music by creating and composing, a path which, following the thoughts of authors such as Burnard, Hickey, Paynter, Priest, Webster and Wiggins, seems to meet the challenges of that model.

### Aims

Write the text here: In parallel with definitions and characteristics, the text presents the PBL as an organizer of the educational action, having in mind the analyses in the context of music. The specific objectives are the contribution to clarify the subject, including the relevance and justification of the proposal around the conception of a music learning model based on problems arising from didactic drawings elaborated from processes of composing; upgrade and substantiate, theoretically and empirically, the PBL educational model, highlighting the relationship and relevance between their assumptions and the research design carried out by the authors and integrated in the Portuguese secondary school.

### Methodology

Write the text here: The text presents a bibliographical review on PBL, defining key concepts and highlighting publications of scientific, theoretical and empirical nature, general and musical, as well as portuguese ministerial documents. The information collected was organized into categories of analysis which constituted the architecture of the text. Sustaining the composition as a path of intervention which identifies itself with the model described, born from formulations developed in the classroom, was consolidated by the study of authors such as those above-mentioned.

### Results/Findings

Write the text here: Descriptions on PBL definition and characteristics stand out, as well as learning process contemplating collaborative work and the teacher as a

facilitator, and, less assertively, effects on knowledge acquisition. Empirical evidence falls upon long-term memory and social interaction gains, as well constraints focusing on the initial adaptation of teachers and students, time management, individual and group evaluation, definition of problems, their relationship with previous concepts, suggesting the need of further investigation. Regarding music education by composing, related ideas about *thinking in sound*, *audiation*, divergent and creative thinking, focus on the student, collaborative work, subjects inherent to challenge based learning, also are highlighted.

### **Conclusions/Final considerations**

Write the text here: As explicit and implicit in literature, learning music by composing resembles ways of solving problems. That is, thinking musically seeking solutions to challenges, being inherent to the creation process, justifies the development of the PBL as complementary to teacher-centered methods and a learning path.

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