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Domesticating AI in the music classroom?

Music teachers' orientations in an emerging practice

*Während künstliche Intelligenz (KI) zunehmend als transformative Kraft im Bildungswesen diskutiert wird, ist wenig darüber bekannt, wie Musiklehrer*innen sie tatsächlich in ihrer Praxis einsetzen. Diese Studie rekonstruiert daher die Normen, Alltagstheorien und impliziten Wissensbestände, die den Umgang von Musiklehrer*innen mit KI prägen. Die empirische Grundlage bilden Gruppendiskussionen, die in einer Fortbildung erhoben und mit der dokumentarischen Methode ausgewertet wurden. Die Ergebnisse zeigen, dass der Umgang mit KI nicht auf stabile Wissensbestände zurückgeführt werden kann, sondern zwischen verschiedenen Modi oszilliert. Die Integration von KI in unterrichtliche und alltagsweltliche Kontexte erweist sich der Analyse folgend als Grenzgang, bei dem die Lehrkräfte fachspezifische, normative und pädagogische Kernwerte der Musikpädagogik neu verhandeln.*

1. Introduction

The use and significance of artificial intelligence (AI) have become central topics in public and educational discourses (De Witt et al., 2023). According to Jörissen et al. (2025), for example, AI is currently causing a crisis of perception that challenges existing orders of knowledge and questions epistemological foundations of education (p. 420).

In its recommendations for action, the German Kultusministerkonferenz[1] (KMK, 2024) also calls for teachers to impart skills that enable a critical, constructive and reflective approach to AI. They should not only use and integrate AI, but also be able to understand the technical basics and the legal implications, to assess opportunities, limitations and risks in order to use AI openly, critically and responsibly (KMK, 2024). Consequently, to integrate AI into teaching, teachers must overcome new technological, ethical, legal and thus reflective challenges. However, there is little empirical evidence on how music teachers are

1 The Kultusministerkonferenz, abbreviated as KMK, can be translated to English as the Standing Conference of Ministers of Education.

addressing these challenges in their teaching practice (Buchborn & Treß, 2023; Cheng, 2025; Treß, 2024). In this article, we therefore focus on the perspectives of music teachers and examine the norms, everyday theories and implicit knowledge that underlie their use of AI.[2]

2. Literature review

Research on AI in schools and teaching has largely been shaped by general educational perspectives that associate AI with an ambivalent transformation process and describe the discourse around it as highly polarised between technopositivist narratives of efficiency and innovation and dystopian scenarios of de-skilling and alienation (Selwyn, 2019). Similar patterns can be found in music education. Generative AI is discussed as enabling low-threshold access to music production and reception and thus as fostering the democratisation of musical practice (Cheng, 2025), as well as supporting individualised learning through AI-assisted adaptive environments (Cheng, 2025; Milakis et al., 2024). At the same time, substantial risks are identified, including the reproduction of cultural and aesthetic biases in generative models (O'Leary, 2025; Treß, 2025), aesthetic and practical standardisation, and an increasing alignment of teaching content with algorithmically curated materials (Bell, 2025). Further concerns address the reinforcement of superficial, product-oriented modes of musical engagement under conditions of pervasive algorithmic curation (Rolle, 2022). Rapanta (2025) sharpens this critique by arguing that generative AI may linguistically simulate critical judgement without enacting it, a problem particularly acute for subjects like music education, that are grounded in aesthetic experience, performativity and reflective judgement (Jörissen et al., 2025).

Empirical research on teachers' engagement with technology has long been dominated by technology acceptance models such as TAM (Davis et al., 1989), which explain adoption with individual intentions and perceived usefulness (Granić, 2023; Venkatesh et al., 2003). While useful for identifying general adoption factors, these models offer limited insight into educational practice, as they largely overlook how technologies are enacted, constrained or reinterpreted in

2 The study was conducted as part of the KuMuS-ProNeD (grant number 01JA23K05D). Funded by the European Union – NextGenerationEU and supported by the Federal Ministry of Education, Family, Senior Citizens, Women, and Youth (formerly the Federal Ministry of Education and Research). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union, the European Commission, or the Federal Ministry of Education, Family, Senior Citizens, Women, and Youth. Neither the European Union, the European Commission, nor the Federal Ministry of Education, Family, Senior Citizens, Women, and Youth can be held responsible for them.

classrooms, and what role implicit knowledge, professional norms and subject-specific value orientations play.

More recent research therefore shifts the focus from acceptance to processes of appropriation and domestication. Storm-Mathisen et al. (2026) show that AI is not implemented linearly in teacher education but is gradually tamed, normalised or rejected in practice. Waldecker and Hector (2023) further condense this perspective praxeologically by conceptualising "domestication" (p. 5) as a situated practice in which technologies are evaluated, limited and normatively framed within everyday routines.

Against this background, calls for "critical GenAI literacy" (Rapanta et al., 2025, p. 1) have gained prominence. However, it remains unclear how such demands can be realised in music education. Initial exploratory studies suggest that music teachers rather use AI for idea generation, material production, or lesson preparation than as an integral element of musical teaching and learning (Treß, 2024).

Overall, current research on AI in music education is marked by a persistent gap between educational debates and subject-specific empirical evidence. While opportunities and risks are extensively discussed, systematic studies reconstructing how music teachers integrate AI into subject-specific decision-making, and which norms and everyday theories guide their practice, remain scarce.

3. Method

To pursue the research interest described, we aim to reconstruct the explicit and implicit knowledge that guides music teachers' use of AI. Our methodological basis is the praxeological sociology of knowledge and its empirical approach, the documentary method (Bohnsack, 2018). Their central principle is the distinction between communicative knowledge, which is explicitly articulated, and conjunctive knowledge – an implicit, action-guiding logic which only becomes visible in the reconstruction of data material. In research practice, the formulating interpretation serves to explore the content and thematic developments, asking 'what' the literal, explicit meaning of statements is. The subsequent reflecting interpretation aims to reconstruct the implicit orientations, i. e. the habitual logics underlying everyday practice, focussing on 'how' practice is established and carried out. By this, the method opens up access to norms and everyday theories as well as to pre-reflexive, implicit knowledge.

Our study is based on audio-recorded group discussions among German secondary school music teachers, that took place during a training course on AI in music education.[3] The course consisted of four phases: an online module for self-study and a whole day in presence, in which teachers gained theoretical and practical knowledge on the use of AI in songwriting and planned lessons together, followed by a period of several weeks in which the teachers tested these lessons in school, and a final online half-day for reflection of the experiences made. The data presented in this article was collected on the whole day in presence in autumn 2024 at the beginning of the training course before any predetermined input. Limitations arise from the thematically selected sample and possible associated selection effects of the participating teachers.

4. Results

In this section, we will present our findings concerning music teachers' norms, everyday theories and orientations with regard to the use of AI in music lessons, drawing on three passages from the beginning of the initial discussion of the whole day in presence.

4.1 'It's fun to enter something there' – Exploratory and playful mode

The following transcripts reflect statements made by teachers. After a brief round of introductions, the participants take turns in reporting on their experiences with the use of AI in the classroom.

3 Discussions were transcribed following the TiQ transcription system (https://transkriptwunder.eu/transkriptionsformate/tiq/). Data was interpreted in German and later translated into English. Ethical guidelines were followed; written consent has been obtained and the published quotations are completely pseudonymised.

120 Dm: └ […] @.@ well uhm: I don't have a lot
121 of experience now, (.) I am focuss- I am of course
122 following this uhm: (.) closely so: there's no (.) getting
123 round the topic at all; (.) uhm: actually ChatGPT uhm:
124 (.)is an increasingly frequent companion in my everyday
125 life; (.) well I have- realise that I've it open in my
126 iPhone really often and it replaces actually the google-
127 search more often, (.) well (.) uh, connected to this for
128 example also the voice assistance; (.) so I speak more and
129 more into it that means something is also changing in my
130 (.)everyday behaviour;(.) I still find=it sensational how
131 you can get: very good (.) uh in quotation marks
132 information very: quickly:; (.) uhm: (.)I have also:
133 integrated: little things in my lessons so that a question
134 is answered by ChatGPT and then: (.) we talk about it
135 together how- how does the answer look like and=so=on: (.)
136 something like that (.) we already did this; (.) uhm:
137 Suno: (.) uhm (((clearing his throat)) is something I also
138 know: (.) we already used it with a lot of joy in class
139 it's fun to enter something there but that was not in=a
140 context that was: (.) uhm: very (.) reflected but it was a
141 free period and then has- I thought we just try it in
142 class; (.) But of course- I think that's very exciting and
143 uhm. (.) I'm also looking forward to suggestions on how to
144 in:tegrate this in a really meaningful way, (.) what kind
145 of opportunities uhm there are; (.) so that's really
146 crazy, yes; (.) well (.) what is waiting there for us; (2)

transcript 1

In his statement, Dm explicitly differentiates between the use of AI in his private and professional life. While he generally considers himself to be relatively inexperienced with AI, he reports increasing use of ChatGPT in his private life (e. g. as a search engine). Calling ChatGPT "an increasingly frequent companion" (124) explicitly refers to an ongoing process of integrating AI into daily routines, while it implicitly frames ChatGPT as an actor who is changing something in his "everyday behaviour" (130). However, Dm's assessment of his AI use is ambivalent. While he expresses his fascination concerning the results of ChatGPT, the statement "very good, uh, in quotation marks, information" (131–132) indicates a certain scepticism about the quality of the results. He seems – at least retrospectively – to cast doubt on the informational content of the AI results.

With regard to his professional life, Dm reports to have "integrated little things" (132–133) and to have discussed the resulting products with students. Exploring the music AI tool *Suno*[4] led to "joy" and "fun" (138–139) in class. His statements reveal that his experiences are limited to isolated teaching situations, which indicates that Dm lacks routine. He further limits his experiences by framing the context as "not […] very reflected" (139–140). Implicitly, Dm distinguishes

4 Suno is an AI tool that creates songs in various genres.

the exploratory practice associated with fun, joy and surprise in the free period from the usual teaching practice that, for Dm, is linked to the norm of reflection. By this, he resolves the tension between enthusiasm and playful exploration and a certain restraint connected to the norm of reflection in his professional life. In this sense he concludes that he is "looking forward to suggestions on how to integrate this in a really meaningful way" (143–144). Thus, despite his playful and exploratory practice, he is still lacking experiences and concepts on how to integrate AI into music lessons in a way that is compatible with his professional norms.

4.2 'I would join this sceptical faction' – Critical, cautious and dismissive mode

Dm's scepticism towards AI-generated information reveals traces of a critical and cautious approach to AI tools in professional practice. In our data, this mode includes positions rejecting AI. In the discussion, following critical comments on the use of AI from a colleague, one teacher assigns himself to 'this sceptical faction'. Although this statement elicits laughter from the group, the previous criticising speaker insists to be 'not just sceptical'. The following excerpt provides insight into everyday theories, norms and conjunctive knowledge that we assign to this mode.

```
Gf:(5) yes: I have- uhm (.) I probably have much more to do with
   AI in my everyday life than I even realise:; (.) ◦That's what
   I assume ◦ (.) But until now, I have always been very
   reluctant in the use (.) uhm of the internet in my private
   life(.) for example, the voice assistant (.) I (.) switch them
   of and somehow I try (.) to keep control about my data in this
   way and when I at(.) I look things up then(.) Then I'll see
   about installing an ad blocker and=so=on and I simply want to
                                          |
?f:                                       └((clear throat))
Gf: know with what kind of sources I'm dealing with; (.) and
    that's why I find these voice assistants (.) totally
    te=rrifying; and we had this week n=educational day and
    there: (.) I had my first real (.) workshop
    on the topic of (.) AI and its possible applications; and
    we can (.) use (.) fobizz this year as a tool (.) with
    data-secure options for pupils;(.) and that's why I thought,
    right, now I really want to get to grips with this; (.)
    because (.) ah uhm:(.) I am (.) incredibly uhm- (.) well I
    would now have incredible respect (.) uhm: for just using
    ChatGPT in class because I can't keep track of all the data
    that is being collected, including from the pupils; (.) and
    now I have some insight into this und I'm (.) incredible uh:
    (.) yes, (.) well it: (.) I am concerned in what
    options are available; (.) I am also concerned about the
    quality of the text material that comes out of it and (.)
    of course I ask myself wh:y should I still make an effort,(.)
    if AI- can si- simply do that; (.) and on the other side (.)
    uhm how do you find= (.) the (.) a good way to deal with
    it with the (.) new possibilities (.) with the students (.)
    what is human creativity worth, (.) and and may also remain
                                      |
?m:                                   └((clear throat))
Gf: valuable or can you now simply- (.) one cannot compete; (.)
    those are the kinds of questions that are uhm really (.)
    important to me and(.) that's where I simply want to know a
    lot @.@
```

transcript 2

Gf proceeds with the differentiation between private and professional use of AI. She states that she has rejected the internet and finds voice assistants "totally terrifying" (178–179), expressing a desire for transparency and control over sources and her own data.

Transferring this private position to her professional practice, she evaluates AI tools according to their associated data security. This becomes clear through her report on a workshop on the use of fobizz[5] as part of an educational day[6].

5 fobizz is a private German digital education platform that provides teachers with teaching materials, professional development offers, and access to digital tools, including AI-based applications, within a legally compliant and data-protected framework for use in schools.

6 German schools regularly hold staff development days where all teachers receive training, e. g. on digital tools.

While the possibility of using "fobizz […] as a tool with data-secure options for pupils" (182–183) is an impetus for her to engage with AI, she frames the use of ChatGPT in the classroom as a negative counterpoint to this approach, as she cannot "keep track of all the data that is being collected, including [that] from the pupils" (187–188).

Going on to explain that she is concerned with both the "possibilities" (196) and the "quality of the text material that comes out of it" (192), her comments reveal various ambivalences and critical dimensions, for example when she contrasts new possibilities with the value of human creativity.

Overall, there are many similarities to Dm's contribution. Just like Dm, Gf explicitly distinguishes between her private practice and her professional life, while, on an implicit level, she draws parallels between them, using her private practice as a positive counterpoint to illustrate her everyday theories about professional conduct. Furthermore, she also explicitly positions herself as a novice and as someone lacking an overview. In her case, however, this leads to different practical coping strategies, as Gf uses digital tools and artificial intelligence in a security-oriented mode. Her distanced, distrustful attitude, established in her private life, is also evident in her professional practice. Only the possibility of using secure, state-provided and approved tools that comply with data protection regulations triggers her impulse to actively engage with the possibilities of AI. Her actions appear to be oriented towards fulfilling her institutional responsibility, the requirements of her employer and (data protection) legal safeguards. Just like Dm, she does not yet possess experiences concerning the professional use of AI in music classes, as she concludes her contribution with her desire to "simply […] know a lot" (202–203).

Furthermore, her statements reveal an implicit comparison between AI and human behaviour. This is particularly evident in the fact that she pits human actions, human "effort" (193) und "human creativity" (197) against the achievements of AI which can "simply do that" (194). Raising questions about the value of 'humanness', she frames AI as an actor that, through its strengths and weaknesses, both threatens and strengthens the value of human action. Thus, similar to Dm, an ambivalence towards the use of AI in professional practice becomes apparent.

Corresponding everyday theories, framing creativity and sensory, physical experience as a necessary counterpoint to a world shaped by AI, can be found repeatedly in our material and are also evident in the implicit concepts of the school subject music held by other teachers. In this context, the importance of music as a subject in school is emphasised and the necessity of dealing with AI as a subject-specific task in music lessons is called into question.

In further passages (not included in the transcripts), teachers critically discuss the quality of AI-generated products on several levels, thus elaborating on an aspect that was already hinted at in the first transcript. According to them, AI-

generated musical products, texts, lesson plans, worksheets etc. do not meet their expectations and contain errors. However, they serve as inspiration, e. g. in lesson preparation, and are adapted for use in class. With regard to the students' use of AI tools, teachers report on a transformation in their professional practice they observe with concern. Describing how students bring more and more AI-generated products into the classroom, the teachers classify the students' use of AI as unreflective, inappropriate and uncritical. This reveals a discrepancy in the assessment of their own practice compared to that of their students: while teachers attribute to themselves the ability to evaluate AI-generated products in terms of their quality and technical accuracy, they deny students these skills.

4.3 "one does not simply take it over …" – Appropriation, reinterpretation and learning in dealing with AI

Dm's reference to his fascination with the 'fast' results achieved by AI tools (see 4.1) already reveals a focus on increasing efficiency, which comes up repeatedly in the discussion:

```
407  Cm:  so: I (.) would now say from the other (.) point of view
408       (.) say I have (.) th- (.) just ChatGPT that has me- uh:
409       (.) I have ChatGPT- tried it a few times during the
410       songwriting process, namely to: simplify this whole
411       timeline of songwriting (.) um: (.) so that was my idea
412       behind optimising it, because this (.) text production
413       always took quite a long time, you know, (.) getting into
414       it and everything, and the students always had a hard
415       time with that, so I thought (.) using the fobizz
416       tool(.) I have (.) the
417            |
418  ?f:       └mh=h
419  Cm:  I gave them access (.)h((breathes))—just enter different
420       prompts and then(.) let the text write itself and then
421       we'll just take care of the music—that was actually the
422       idea; (.)
423  ?f:     └mh=h
```

transcript 3

After a longer negotiation of critical positions regarding the use of AI in music education, Cm responds to this discourse with an antithetical elaboration (s. transcript 3): Based on his own initial teaching experience with AI, he reports on the use of ChatGPT in the context of "songwriting" (411) and (song) "text production" (412) via fobizz.

As the main reason for integrating the chatbot, Cm cites his experience that writing song lyrics "always took quite a long time" (413) and that the students "had a hard time" (414–415) with this task. He explicitly mentions the expecta-

tion that the use of a chatbot will "optimise" (412) and speed up this phase. The passage documents a focus on increasing efficiency by shifting learning time from lyrics to music through the use of AI. Further, a focus on avoiding hurdles, barriers and difficulties in the students' learning process and preferring product over process becomes apparent. On an implicit level, Cm's description reveals that in his view, writing song lyrics appears merely as a means to an end that does not meet the core of the subject music. Thus, it can be substituted by AI in order to devote oneself to the actual subject matter of the lesson – making music (420–422). This reveals an implicit process of reducing complexity by selecting, devaluing or revaluing phases of the songwriting process according to the implicit subject-specific values.

```
424  Cm:  um: (.) the result, however, was, um: (.) that the
425       students: (.) for the most part, didn't use this text
426       from ChatGPT at all (.) because it wasn't their text—they
427       had nothing to do with it: (.) and didn't want to and,
428       um, they (.) then mainly just used it afterwards (.) to
429       find rhymes, (.) so they (.) just (.) typed in (.) what
430       rhymes fit with (.) and then found results, so they
431                                                   |
432  ?f:                                              └mh
433  Cm:  that was what then: was taken over and then: I thought to
434       myself that's:- great so (.) maybe
435                                    |
436  ?f:                               └mh:
```

transcript 4

Cm then elaborates on how, as the lesson progresses, his expectations and thus also his arguments for using the chatbot in class are undermined by the students' actions. Instead of taking over the chatbot's text results, the students distanced themselves and refrained from using the generated results (426–427). Rather, they continued to use the chatbot as a supportive medium for their own creative process.

Cm subsequently assesses this turn as highly positive (434). The way he talks about this experience, however, reveals a high degree of astonishment and surprise, as can be seen from the multiple attempts at narration, the interruptions and pauses in speech (427–430). This dense narrative passage thereby documents a retrospective reflection on the breach of expectations in the context of still limited experience with technology use.

```
459  Cm:  It's exciting that AI ultimately triggers a creative (.)
460       process and that they
461            |
462  Dm:       └mh:
463  Cm:  but they make the thing their own, so there is also (.)
464       ste- for me, there is so much reassurance in it, (.)
465       because (.) if (.) one does not simply take it over.
466                       |
467  ?f:                  └@.@
468  Cm:  not easily, but (.) you end up doing your own thing,
469       which is pretty cool; (2) so; n=you make it your own
470       thing, which is pretty cool; (2) so;
471  Dm:  (.) yes;
```

transcript 5

Finally, Cm frames the chatbot as a trigger for creative work. Arguing that a deeper engagement with text writing has led to a comparably higher degree of identification, Cm's emphasis of "their own" (436, 469) indicates the perception of an identity-forming learning process on the students' side. Although this experience contradicts his initial expectations and his own values concerning music making, he evaluates it as reassuring (464). On an implicit level, Cm's reaction reveals that he (and several colleagues throughout the discussion) perceive AI as a potentially threatening technology. Classroom experiences, however, seem to mitigate this potential.

4.4 Summary

Although we have only referred to a relatively small sample in this study and cannot yet assume a complete picture due to the limitations described, our reconstructions already provide differentiated insights into the everyday theories, norms and implicit logics that determine the use of AI in music lessons at this early stage of implementation. Overall, teachers largely equate AI with ChatGPT without explicitly stating or reflecting on this. This suggests that the service is highly dominant in their perception. Exceptions include reports on the use of the song generator Suno and the tools provided by fobizz, although the latter are merely regarded as an alternative to ChatGPT that is unobjectionable in terms of data protection and service law.

Further, teachers differentiate between private and professional use of AI on an explicit level, although the reconstructed modes implicitly underpin both areas of experience. Practice oscillates between a playful, exploratory mode, which is accompanied by a positive attitude towards change, and a cautious, critical, sometimes dismissive mode, which is accompanied by a defence of established practice. While the coexistence of these orientations might seem contradictory at first glance, we interpret their simultaneity as a sign for the teachers' little experience with AI. While a (new) practice with an associated routine and underlying

orientation knowledge still seems to be underdeveloped at present, a transformation of existing action-guiding knowledge has been initiated. An example of such processes can be seen in our third example (4.3). While exploring a new teaching approach that uses AI, the teacher goes through a learning process that leads to a reassessment of the possibilities, but also to a correction of AI-related everyday theories.

Further findings – such as the practices of distancing oneself and acting in the habitus of a novice – support the impression that a new practice is being established. Furthermore, the descriptions of how students deal with AI show that teachers are also experiencing a transformation in learning practices at this level of school life. This is linked to concerns about students' uncritical use of AI, fears that the new possibilities will hinder rather than promote learning, but also that the value of skills and competences such as text production will have to be reassessed and school learning objectives will have to be realigned.

5. Discussion

Our findings empirically specify the tensions already identified in research on AI in school (music) education. But rather than manifesting as two stable, opposing positions – technophile narratives of efficiency and innovation versus dystopian diagnoses of de-skilling and alienation (Selwyn, 2019) – these tensions appear as situational modes of teachers' professional action. The playful–exploratory engagement with AI aligns with Selwyn's (2019) argument that educational technologies can open up new pedagogical possibilities when used experimentally, "to show us a genuinely new way of doing things, rather than attempting to 'efficiently' replicate what is already being done" (p. 136). The reconstructed distinction between playful experimentation (e. g. in free periods) and reflexively legitimised regular teaching points to implicit ethical boundary work in professional practice, indicating that teachers assess AI primarily in relation to what counts as responsible pedagogical practice.

The critical, cautious to dismissive mode can similarly be linked to Selwyn's (2019) observation that technological innovation is often accompanied by a delegation of responsibility. In this context, O'Leary's (2025) claim that "critical AI literacy" requires corresponding institutional conditions (pp. 155–156) is empirically substantiated. Teachers' demand for data-protected, institutionally legitimised tools suggests that scepticism towards AI is also an expression of perceived institutional, pedagogical, and subject-specific responsibility. Critical AI competence thus emerges as a structurally framed professional practice which, from the teachers' point of view, is either promoted or hindered depending on the existing structures.

Particularly salient is the empirically reconstructed juxtaposition of generative and human creativity. While this opposition is widely discussed in abstract

terms (Cheng, 2025; Nichols et al., 2025), the present findings show how it becomes operative in music educational practice as a form of subject-specific self-affirmation. Creativity, authorship, corporeality and aesthetic experience function as normative reference points through which the value of music education is asserted in relation to algorithmic production. In this respect, the results support Nichols et al.'s (2025) interpretation of AI scepticism as professional self-assertion rather than regressive rejection.

Although efficiency logics criticised by Selwyn (2019) and Cheng (2025) initially shape teachers' expectations, the findings show that such orientations can be productively disrupted in classroom practice. In line with Rapanta (2025), critical engagement with AI appears where teachers' expectations fail and are reinterpreted. This offers an empirical correction to deterministic assumptions that AI necessarily erodes creative processes.

Further, the reconstructed modes confirm Waldecker and Hector's (2023) assumption that the domestication of artificial intelligence can be considered as a situational practice of evaluation and adaptation. Selective use in marginal contexts, reliance on institutionally legitimised tools and scepticism towards AI outputs can be read as forms of professional "taming" (Waldecker & Hector, 2023, p. 7). In this sense, the findings refine Storm-Mathisen et al.'s (2026) diagnosis of defensive domestication by showing that restraint is less resistance to innovation than a profession-ethical strategy to safeguard educational responsibility and subject autonomy.

In summary, teachers act neither as passive users nor as categorical refusers, but rather as actors who integrate, limit or reject AI depending on the situation, while also struggling with professional standards, institutional responsibility and professional ethical boundaries. This perspective gains further depth when considered alongside the findings of Jeddeloh et al. (in press), who identify AI as a source of professional irritation that reaches into teachers' (and researchers') core self-concepts in music education. In our view, it is precisely this situational modulation that confirms the need for teacher-centred, praxeologically grounded research, which has been called for in the literature.

6. Epilogue: (Self-)reflection on scientific practice in the age of AI

Finally, this study also invites reflection on the role of educational research within current AI-related transformations. As AI-related practices evolve rapidly, research is increasingly exposed to normative expectations to provide orientation, evaluation, or guidance. The rapid development makes it difficult to build up a comprehensive, homogeneous sample. Data we collected a year ago can only be compared with current material in terms of how practice has changed since then. Qualitative research and especially our rather time-consuming reconstruc-

tive approach can hardly keep pace with the speed of innovation and adaptation in the field.

Further, the role of academia in this current transformation is a key issue for us. As we observe, teachers are under normative pressure when social, political, ethical, legal and subject-related discourses, as well as the omnipresence of AI in public debate, challenge them to realign their professional practice. In addition, current third-party funding guidelines and, as a result, many research and development projects on digitalisation are bringing norms of innovation and technologization into (music) education practice and are reinforcing the overall social dynamic.

Following Selwyn's (2022) cautionary notes and research-ethical considerations outlined by Ahlborn et al. (2025), we argue for resisting this normative pull. Rather than accelerating innovation agendas, educational research can contribute by critically examining how AI is negotiated in practice and by making visible the tensions, ambiguities, and limits that shape teachers' professional engagement with AI.

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