

Exploring teaching quality from within: A praxeological perspective

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Abstract This contribution proposes a respecified concept of teaching quality, grounding it in a praxeological paradigm of classroom research. We argue that, when addressing teaching quality, the complex interactive relations between teaching and learning as *social practices* should be taken into account. The notion of teaching quality *from within* that we discuss develops two arguments: 1) the analysis should necessitate considering the embedded norms and objectives inherent in teaching and learning practices as an empirical basis for making judgments about teaching quality, and 2) the analytical focus must be placed on the orientation of classroom practices towards enabling *subject-specific learning*, which we argue rests at the heart of teaching quality.

Keywords Teaching quality · Learning · Social practices · Praxeology

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Untersuchung der Unterrichtsqualität von innen heraus: Eine praxeologische Perspektive

Zusammenfassung In diesem Beitrag wird ein neu ausgerichtetes Konzept der Unterrichtsqualität vorgeschlagen, das in einem praxeologischen Paradigma der Unterrichtsforschung begründet liegt. Wir plädieren dafür, bei der Betrachtung von Unterrichtsqualität die komplexen interaktiven Beziehungen zwischen Lehren und Lernen als *sozialen Praktiken* zu berücksichtigen. Das diskutierte Verständnis einer Untersuchung der Unterrichtsqualität *von innen heraus* entwickelt zwei zentrale Thesen: 1) die in Lehr- und Lernpraktiken selbst eingebetteten Normen und Ziele sind analytisch zu rekonstruieren und die evaluativen Aussagen über die Unterrichtsqualität auf sie als empirische Grundlage zu beziehen; 2) der analytische Fokus ist auf jene Unterrichtspraktiken zu legen, die auf die Ermöglichung *fachlichen Lernens* ausgerichtet sind, weil dieses aus unserer Sicht als Kernstück von Unterrichtsqualität angesehen werden kann.

Schlüsselwörter Unterrichtsqualität · Lernen · Soziale Praktiken · Praxeologie

1 Introduction

In the social sciences, it is not self-evident to ask about ‘quality’ since sociological analysis mostly aims at description and not at judgement. But in educational research, the question of the quality of teaching does arise at the latest when it comes to improving teaching and in the context of teacher education. Researchers concerned with teaching quality aim to distinguish between ‘successful’ teaching, which is measured by the achievement of its goals, and ‘good’ teaching, which is conceptualised from a normative perspective through pedagogical assumptions about its desirability or beliefs (Berliner 2005). However, this distinction is not as simple as it seems to be: How do we define the ‘success’ of teaching? And how do we measure it? Some perspectives suggest that the quality of teaching may be linked to its ability to produce learning, framing it in terms of achieving specific outcomes (Fenstermacher and Richardson 2005). However, teaching as a practice is characterised by its own normativity, as it is directed towards certain, partly implicit goals. One may, then, want to ask again: What does ‘quality’ mean in relation to teaching? And how can it be investigated? These two questions are interrelated, as the means of the research predefines the concepts of ‘quality’ and vice versa (Elf 2021). In this article, we want to reflect on these questions and argue for a notion of teaching quality that, grounded in a praxeological paradigm of classroom research, takes into account the complex interactive relations between teaching and learning as social practices. We argue that, when addressing teaching quality, one must consider the multilayered character of these practices as being *situated* in the practical circumstances of the classroom setting; *related* to specific goals and objectives of local classroom activities with their immanent normative orientations; and formatted by learning *materials* and *tasks* that contain their own normativity embedded in these didactic objects. Far from offering a new conceptual framework or a co-

herent methodological approach for analysing teaching quality, we seek rather to provide some reasons why we are concerned about respecifying teaching quality as something that should be analysed *from within*—that is, by exploring the local circumstances of classroom activities. This requires going beyond the subjective standpoints of the teachers or the students, as well as beyond external, objectivist forms of evaluation. We discuss some conceptual tools that can enable us to address quality as an inherent feature of classroom practices and, at the same time, to ask how they relate to enabling subject-specific learning, which we argue rests at the heart of teaching quality.

2 Assessing teaching quality in standardized classroom research

Until now, the concept of *teaching quality* has predominantly been associated with standardised classroom research. In the context of educational research, the quality of instruction has traditionally been assessed from three main perspectives: that of teachers, that of students, and that of external observers. Students' assessment of teaching quality is usually obtained through student questionnaires. The use of such questionnaires is particularly appealing due to its cost effectiveness and efficiency in capturing this complex construct (Senden et al. 2022). While research has demonstrated that student assessments of teaching quality can be considered valid, even that of younger students in primary school (Fauth et al. 2014), these evaluations often leave ambiguity regarding the specific aspects of instruction they address. This gap is particularly concerning when considering that students may base their judgments on different frames of reference, such as individual experiences, rather than classroom-level dynamics (Fauth et al. 2020).

Teachers' self-assessment of teaching quality, also mostly captured through questionnaires, continues to be a common resource in educational research. However, this method has increasingly come under criticism due to concerns that teachers may be too biased to objectively evaluate their own teaching (Senden et al. 2022). Empirical evidence supports this critique, showing that teachers' ratings of instructional quality often differ significantly from those of students and external observers. Specifically, studies have found that teachers tend to rate the quality of instruction lower than students and external observers do (Kunter and Baumert 2006).

The assessment of teaching quality by external observers is often regarded as the most 'objective' measure. External evaluations are considered less susceptible to the biases that may affect self-assessments by teachers or the perceptions of students. These observations typically involve video recordings of lessons, which are then evaluated using pre-defined observation manuals designed to estimate the 'quality' of teaching across various pre-defined dimensions. On an international level, numerous different observation manuals are used (e.g., Pianta and Hamre 2009; Grossman et al. 2013; OECD 2020). These instruments tend to aggregate different subdimensions, which describe specific behaviours or actions, into overarching dimensions. In German-speaking countries, the framework of the Three Basic Dimensions has become particularly established in recent years (Praetorius et al. 2018). Internationally, similar three-part structures are frequently found (Pianta and Hamre 2009;

OECD 2020), although there is a current trend towards expanding beyond these rather sparse dimensions (Bell et al. 2019; Praetorius and Charalambous 2018). The naming differs, but there is some consensus that classroom management, supportive climate, and cognitive activation (or more specific didactic and instructional aspects) comprise the foundations of teaching quality.

These dimensions are evidence based, as they have been shown to be related to successful teaching in terms of measurable learning outcomes (Doan et al. 2020; Maulana et al. 2023). However, it is becoming increasingly apparent that this form of assessing teaching quality has its limitations. At the forefront of such doubts is the question of the conceptualisation of teaching quality and its associated dimensions (Praetorius and Charalambous 2018). Recently, the focus has shifted to the need to consider the subject-specific nature of the dimensions of teaching quality, as many manuals tend to result in generic assessments (Schlesinger et al. 2018). Moreover, there is growing criticism of the teaching quality models and their statistical representations. In German-speaking countries, the so-called opportunity–use model of teaching quality has become more prominent, in that it has moved away from the process–product paradigm (Vieluf and Klieme 2023). More recent conceptualisations no longer claim to explain the outcome of teaching; instead, they make a fundamental distinction between the ‘opportunities’ provided by teaching and their ‘use’ by students. Both parts are investigated independently of each other. The way in which students make use of the opportunities provided by teaching depends on various factors, including preconditions on the parts of the students. In this conceptualisation, the opportunities provided by teaching are very much seen as the activity of the teacher, and teaching quality depends on the knowledge, beliefs, and competences of the teacher herself. What is neglected is both the role of the students in providing ‘opportunities’ for learning and even more so the interactive nature of teaching itself (Vieluf and Klieme 2023). Additionally, an emerging discussion highlights the risk of (mis)using these observation instruments to evaluate teachers instead of teaching, including the involvement of artificial intelligence in such evaluations (Gitomer et al. 2020).

3 The challenges of primary education for research on teaching quality

Some of the limitations of research on teaching quality with standardised manuals relate particularly to classroom research in primary education, where very heterogeneous conditions among learners play a particularly central role, especially in the early years, and where subjects are not always clearly defined, with a single teacher often responsible for several subjects. As stated by the UNESCO Institute for Statistics (2012, p. 30):

“Educational activities at ISCED level 1 (particularly in the early grades) are often organized around units, projects or broad learning areas, often with an integrated approach rather than providing instruction in specific subjects. Typi-

cally, there is one main teacher responsible for a group of pupils who organizes the learning process, although a class may have more than one teacher, especially for certain subjects or units”.

What this structure might mean for research on teaching quality remains an open question, but there is obviously the need to ask about the different conditions of learning and their differential impact on teaching.

Primary education, at least in Germany, is organised to some extent in terms of ‘individualised’ teaching, which relies on practices of ‘self-regulated’ learning and on students working autonomously on (different) tasks (Tyagunova and Breidenstein 2023). This kind of teaching and learning relies especially, though not exclusively, on learning materials that facilitate self-control and can be considered didactic actors (Breidenstein 2023). In this respect, the analysis of teaching quality must encompass the materiality of teaching practices. Since parts of the teaching are ‘delegated’ to the learning materials, the investigation of teaching quality would also have to take into consideration the design, production, and use of the learning materials (Lange 2025).

Explorations into teaching quality would also have to include the classroom tasks themselves, as the tasks set by the learning materials, the textbooks, or teacher instruction are formative for large parts of teaching, particularly in primary schools. Here, the analysis of the quality of tasks would have to consider not only the ‘intention’ of the task—the learning opportunities that the task potentially implies—but also its situated use in the classroom.

Finally, when asking about teaching quality in primary education and beyond, it is necessary to take into account the characteristics of classroom discourse and its basic patterns, such as the well-known I-R-E sequence, which have to be learned in the first years of school (Mehan 1979). It is also necessary to pay attention to the practices of ‘doing student’, as well as the concept of “studenting” (Fenstermacher 1986), each offering distinct perspectives on how classroom interactions and processes unfold. The pragmatic attitude of “pupil strategies” (Woods 1980) is not evident at the beginning of the school career but is an effect of everyday practices and routines. The fundamental relevance of interaction patterns, routines and rituals is immediately apparent; most of what goes on in classrooms is not related to anyone’s plans or intentions but rather is passed on as a social practice.

4 Respecifying the notion of teaching quality

Against this background, we would like to suggest a way of conceptualising teaching quality that draws on praxeological classroom research, which establishes practices as a basic element of social reality and as an object of investigation in its own right. The praxeological approach is particularly revealing for the analysis of school lessons, as the classroom is a very stable environment for social interaction: the same participants meet each other on a daily basis; much of what happens is based on persistent routines and can be conceptualised as a bundle of social practices that include materialities, bodies, and participants in different roles. Classroom practices

are complex and multi-layered, often pointing in different directions and potentially “interfering” with each other (Breidenstein 2021). At the same time, the praxeological approach is quite challenging for research on teaching quality because it does not focus on individual ‘actors’, such as teachers and students, but on social practices that include, and constitute, human beings as ‘participants’ or ‘members’ of these practices (cf., Garfinkel and Sacks 1970, p. 342). As participants, ‘teachers’ and ‘students’ are both shaping and shaped by the interactive actions and procedures that are constitutive of the classroom practices.

In praxeological classroom research, it has not yet been common to address teaching quality, as practice theories are primarily descriptive and tend to avoid normative questions, such as those surrounding ‘quality’. However, classroom practices inherently contain a kind of normativity, in that they are directed towards certain objectives, purposes, tasks, and the like. There are likewise multiple normative orientations at play within the social practice of a classroom, such as enabling learning, promoting well-being, and having a good time. Which of these orientations should be referred to as aspects of ‘teaching quality’? We might speak of teaching qualities in the plural—different orientations that can be treated as contributing to and accounting for what is taking place in the classroom. Nevertheless, we have good reasons to focus on (subject-related) learning as the primary orientation of the classroom practices themselves. It is likely that participants would agree that providing the possibility of subject-related learning is at the heart of the whole arrangement. The extensive effort of assembling around 25 children alongside a well-trained and well-paid adult in a classroom must result in something that can be understood as ‘learning’. Classroom practices contain numerous activities that serve the purpose of demonstrating that something has been ‘learned’ (or could have been learned), such as presentations, examinations, and student products of all kinds. Of course, we also learn all the time and everywhere in our daily lives; however, the social practice of the classroom is not directed towards just any kind of learning but towards specialised learning, which is (mainly) confined to schools, divided into subjects, and scheduled into lessons. In this respect, one might ask to what extent classroom practices are oriented towards this kind of *school* learning. We therefore suggest that when asking about the quality of teaching, the primary focus should be placed on the orientation of classroom practices towards enabling subject-specific learning. Having said this, we should also bear in mind that this orientation towards (the possibility of) learning may be interrupted, modified, or challenged within the situation by the various contingencies that can occur.

We thus argue that teaching quality must be seen as

- *situated*: Since school teaching and learning take place in the institutional and social setting of the classroom, they are closely tied to the specific concerns and practical circumstances of that setting. In this respect, teaching quality cannot be separated from its situated performance and can only be observed and evaluated in the context of the situated practices of the classroom. These classroom practices establish their own local orders (Hester and Francis 2000; Macbeth 1990), and teachers and students hold each other accountable for what they should or should not do and know as members of these practices. Whether the students

are expected to pay attention to the teacher-directed activities conducted in the whole-cohort teaching format, whether they are held accountable for working individually on their own tasks in the context of ‘individualised learning’ in ‘open classrooms’, and whether they are encouraged to ‘collaborate’ during pair or group work phases are all forms of classroom order. Consequently, what could be treated as rational, adequate, desirable, or meaningful is contingent on a local classroom order: different orientations can be relevant, and pragmatically preferable, in different situations;

- *relational*: Teaching quality must be related to the specific orientations and goals of the concrete practices. The teacher’s job can be seen as taking steps that are aligned with the lesson’s objectives and continuously reshaping the learning environment towards the goals set up for a particular lesson. The rationality and adequacy of these steps should be considered in terms of their relevance to the subsequent activities as the lesson unfolds in an actual situation. To make a concrete lesson ‘happen’ in line with the particular objectives set up for that lesson, the teaching practice must operate in an inevitably selective way: it must draw the students’ attention to certain phenomena and issues and not to others. Any reflection on the quality of teaching needs to take into account this selectivity inherent in teaching practice. Since each lesson is assembled from a series of local classroom events and activities—filling in a worksheet during student group work is a different practice from conducting a whole class discussion, for example—reflecting on teaching quality must also consider the relative differences between the orientations and functionalities that are constitutive of different classroom activities, which may sometimes be in tension with each other (Sert et al. 2021);
- *material*: Classroom practices are multimodal events (Kress 2010; Markee 2015) and include materials of all kinds: blackboards, worksheets, flashcards, educational games, science kits, and, not least, textbooks (Macgilchrist 2017). As a means of illustration, clarification, and demonstration, classroom materials represent school knowledge. At the same time, they are heavily involved in framing and structuring what is considered ‘school knowledge’ and, thus, in structuring teaching and learning processes (Ekström and Lindwall 2014; Röhl 2015; Sørensen 2009). Materials used in the classroom have an affordance character—they are instructive in that they suggest and pre-figure a certain course of action (Kalthoff et al. 2019). The role of these didactically invented school objects, specifically designed for educational purposes, and the role of the tasks that these objects enable to set, specify, visualise, and so on, should be taken into consideration when investigating teaching quality.

The situated, relational, and material character of classroom practices also means that we should take into account their *subject specificity*—that is, that classroom practices are related to and produced inseparably from particular school subjects. The notion of teaching quality must consider this relationship and the subject-specific dimension of classroom interaction. What happens in the classroom is not just any kind of interaction, but one that is ultimately intended to enable subject-specific learning, and those involved relate not only to each other but also to the content of the lesson in one way or another (Lindwall and Lymer 2008). Of course, classroom

practices also cross subject boundaries, but at the same time they are linked to subjects in specific ways. For example, writing is a widespread practice across various school subjects, but in language classes, writing is part of teaching and learning in a different way than, say, in mathematics classes: not only is it the object of instruction in a distinct way, but it also requires organisational elements and forms that are characteristic of teaching and learning in these particular subjects. Similarly, drawing can be found in both mathematics and art classes. However, in mathematics it is linked to different purposes and tasks and is realised through different techniques than in art.

In summary, conceptualising teaching quality from a praxeological perspective highlights the complexity of classroom practices as situated, relational, subject-specific, and grounded in materiality. This perspective suggests an examination of the embedded norms and objectives inherent in teaching and learning processes as an empirical basis for making judgments about teaching quality.

5 Exploring teaching quality from within

But what exactly does this respecified perspective of teaching quality mean for research on teaching quality? And what does ‘teaching quality’ mean in regard to specific classroom practices? In the following section, we would like to discuss some conceptual tools for exploring teaching quality ‘from within’, which can enable us to address quality as an immanent feature of classroom practices. In particular, we will consider:

- Schatzki’s theory of social practices, which allows us to take into account the normativity inherent in classroom interaction practices;
- Baltruschat’s notion of the “inner logic” of the subject matter in order to be able to consider the subject-specific dimension of classroom interaction;
- the ideas of Joint Action Framework in Didactics, which can help to reconstruct the development of knowledge content within specific teaching units (during a single lesson or a sequence of thematic units).

Schatzki (1996, p. 89) conceptualises practices as a “nexus of doings and sayings” linked by characteristic understandings, rules, and, less frequently discussed, normative orientations. Social practices have normative orientations, in that they include specific “teleoaffective structures” as their organising component, which consist of “hierarchies of ends, tasks, projects, beliefs, emotions, moods, and the like” (Schatzki 1996, p. 99). Moreover, the entire organisation of a practice is, as Schatzki points out, normative. The practice’s inherent normativity can be found “in the presence and absence of corrective, remonstrative, and punishing behaviours and in the verbal and nonverbal injunctions, encouragements, and instructions” (Schatzki 1996, p. 101). That is, the understandings, rules, and teleoaffective structures that organise a practice specify how actions should be performed and understood, what should be done or said, what goals are to be pursued, what tasks and actions should be undertaken toward those goals, and what emotions are expressed when one is engaged in the practice.

If we assume that normative orientations are embedded in classroom practices themselves, then the investigation of teaching quality should explicate these orientations. What conceptions of ‘quality’ are guiding for the practitioners themselves? What norms do they orient their actions towards (Martens and Asbrand 2022)? In this way, normative issues are addressed as participants’ concerns, with the primary analytical interest focused on what members themselves regard as competence, understanding, expertise, and other qualities relevant to the practical accomplishment of their everyday activities in the classroom according to situational needs (Garfinkel 1967). Normative expectations—for example, about what counts as a correct solution, classroom-compliant behaviour, or active participation—are often not verbalised but shaped by tacit orientations that underlie acts of knowing and meaning-making (Mannheim 2013). Considering the immanent normative orientations of teaching and learning practices does also entail recognising their autonomy to a certain extent. Teachers and students do not act according to predetermined normative standards of teaching and learning but rather adjust their normative orientations to their perceptions of what the actual situation requires.

At the same time, when asking about teaching quality, the analysis would have to include the subject matter and its requirements. If we understand teaching in terms of its orientation towards enabling subject-specific learning, we need to reconstruct the ways in which teachers’ and students’ actions relate to the subject matter of a particular lesson. Some ideas developed by Baltruschat (2018) can be helpful here. To the extent that both modes of action—teaching and learning—are orientated towards the subject matter, they have a ‘teleological structure’, and as acts of teaching and learning, they only become comprehensible and accountable in relation to the subject matter of the lesson (Baltruschat 2018, p. 75). There is no freestanding ‘subject matter’ as such. Instead, it only takes shape in classroom interactions, through the process of dealing with it. It is structured and developed during the lesson through the interactive practices of teachers and students.

A number of studies within praxeological educational research have shown how the subject matter emerges through classroom interaction and how it is constituted and constantly reconstituted by the participants in the lesson (e.g., Heller 2016; Jakonen and Morton 2015; Melander 2012). However, if we want to say something about the *quality* of teaching, the analysis must reveal more than simply how subject matter is interactively co-constructed by the participants. We must understand how the situationally co-constructed elements of the ongoing interaction relate to the *targeted* subject matter of the lesson, or, to borrow a formulation of Baltruschat (2018), to the “inherent meaning structure” of the subject matter, its “inner logic”. It is this “inner logic” of the subject matter against which the teacher’s instructional actions and the solutions adopted by the students can be judged as appropriate or misleading. It may turn out, for example, that the medium chosen to represent and articulate a particular piece of content, or the solutions employed to approach it in the lesson, do not do justice to the inner logic of the subject matter being addressed (Baltruschat 2018, p. 67).

This notion of inner logic substantiates the point that the subject matter and the material artefacts with which a particular subject matter is represented and articulated in a lesson also participate in the constitution of meaning, because they

are, as Bruno Latour (1999) would say, ‘equipped’ with signs of what they are suited for. There may be many ways of dealing with particular subject matter, but not all of them could be considered adequate or congruent with its inner logic. If we take seriously the role of the subject matter as a “third” participant (Baltruschat 2018, p. 61 ff.) in teaching and learning practices, then the analysis of how teachers and students approach and jointly construct the subject matter must relate these joint constructions to the inherent meaning structure of the targeted subject matter. Both aspects, however, can only be clarified in relation to the actual classroom situation, which provides an insight into how the accessibility of the subject matter develops *within* the classroom interaction.

With an understanding of teaching and learning as a “joint action” (Ligozat and Buyck 2024), it becomes possible to analyse the development of knowledge content in the interplay between the teacher’s instruction and the learners’ ways of dealing with the task by asking “how the content move[s] within the teacher’s and the students’ joint actions” during a lesson (Ligozat et al. 2018, p. 165). The concept of “knowledge content progression” developed by the Joint Action Framework in Didactics (JAD) aims to capture and describe such interactive moves in knowledge content development through the succession of tasks in the classroom: “Based on meanings construed about the task [...], these moves regulate and institute the knowledge content progression over time through various kinds of actions in discourse” performed by the participants (Ligozat and Buyck 2024). With regard to the quality of teaching, the analysis would, therefore, necessitate considering both the conditions for knowledge development (characteristics of tasks) and the opportunities for students to participate in the development of actual knowledge over time in classroom interaction (Ligozat and Buyck 2024). Furthermore, the analysis of teaching quality in a more situated and praxeological sense probably cannot be limited to a single lesson but must at least consider the development of knowledge over a series of lessons, asking about “knowledge in motion” (Nespor 1994).

Up to this point, our considerations have remained rather abstract, and it may be useful to present an example to discuss the challenges of exploring teaching quality from within in a more concrete way. Let us look at a research project that was conducted by a research group of the University of Kassel from 2009 to 2011. The project, Cooperative Student Feedback in Text Revision in Elementary School German Lessons (KoText), aimed at comparing and evaluating two settings in which students were asked to give each other feedback on their own texts (stories) in order to improve them. The measurement of the quality of the students’ texts reveals a slight increase in quality in one setting and a decline of quality in the other (Reichardt et al. 2014). At the same time, the qualitative analysis of the video-recorded interaction at the students’ desks shows a great variety in the ‘qualities’ of peer interaction directed towards achieving social cohesion, towards entertainment (Eckermann 2017), as well as towards the task (giving feedback on the story). Different normative orientations are certainly at play here simultaneously, but when asking about *teaching quality*, we suggest focusing on the opportunities for subject-specific learning. This assertion means that the improved quality of the texts is not the only criterion for evaluating teaching quality; we can also consider giving feedback on a text as an objective (and an aspect of quality) in itself. Exploring

teaching quality from within would likely here mean including in the analysis not only the students' texts but also the teachers' instructions and the students' activities during the feedback phase. Relating texts to teachers' instructions and students' activities remains a challenging task—not only for the participants but also for the researchers (Heinzel et al. 2023).

Teachers and students themselves, of course, observe what is occurring in the classroom and how it may be evaluated in terms of quality. In the example, the teachers may observe how the students interact with each other and try to assist them by offering advice and hints. They may ask themselves how well the setting works, and they also may try to estimate the improvement in the quality of the students' texts. In relation to these observations of the teaching quality by the participants themselves, we can, according to Luhmann (2012), conceptualise what research does as a second-order observation: an analysis of the criteria and practices of evaluating teaching quality that can be observed as part of the local teaching and learning practices.

In conclusion, we have argued for a notion of teaching quality that is responsive to the practical circumstances of the classroom situation and at the same time capable of questioning the potential of the observable practice. We have pointed out that considering teaching quality in this way must take full account of the local conditions and the very concrete ways in which the subject matter is approached. Moreover, this perspective allows for a distinction between external quality, understood in terms of the output orientation pursued in much of the existing research on teaching quality, and internal quality, which focuses on the immanent logics of classroom practices. At the same time, this perspective requires transparency about the externally determined focus that is chosen to assess the immanent normativity of classroom practices and to evaluate teaching quality. This kind of research on teaching quality from within has to rely on qualitative methodology, trying to reconstruct the immanent logics of practices and the interwoven activities of their inhabitants, who often act under great pragmatic and temporal pressure.

We have discussed some conceptual tools that may sharpen our focus on the functioning of the local classroom order, the requirements and affordances of the subject matter at stake alongside the material objects involved, and the conditions of knowledge development within the classroom situation. However, we are well aware that it is not obvious how these tools may fit together and how they may be combined in the analysis of teaching quality. We suggest that this topic should be explored within concrete case studies that seek to capture teaching quality from within—and in doing so, the notion of teaching quality itself must be further elaborated.

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