#### KAPITTEI 9

# Assisting. Reconstructing a Cooperation Pattern on a Video Basis among Co-teachers in the Programme Jedem Kind ein Instrument

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Abstract: The programme "Jedem Kind ein Instrument" (JeKi) in Germany demands the cooperation between primary school and music school teachers, working in teams of two for one lesson each week during the first year of school to offer basic musical training and to present various musical instruments. The ideal that the teachers' skills complement each other is guiding the programme but preliminary results from a study on JeKi showed that there is hardly any coordination prior to co-taught classes, mostly due to a lack of time. This leads to the relevant research question concerning how teachers collaborate for co-classes when the very requirements for successful collaboration, i.e., coordination and communication, are mostly

<sup>&</sup>quot;An instrument for every child" – music educational programme for primary schools in Germany, abbreviated: JeKi (translator's note), for further information on this programme and the successor programme JeKits visit: https://www.jekits.de/das-programm/jedem-kind-eininstrument/

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missing, but co-teaching still takes place, albeit sporadically. In order to address this desideratum, this video study tries to reconstruct an interactional framing of assistance as the predominantly found model of cooperation between music teachers from different professional backgrounds.<sup>2</sup>

**Keywords:** assisting, cooperation, elementary school, music education, music school, reconstructive research

# Classroom cooperation in co-teaching formats Background: Co-teaching in "JeKi"

In the current state of the discourse, there is a lot of discussion about class-room collaboration and cooperation<sup>3</sup> in international school and educational research (Friend et al. 2010; Keddie 2015; Lütje-Klose & Willenbring 1999). In addition to inter-school collaborations, there is an increase in classroom projects involving the collaboration of schoolteachers with staff from outside the school context, e.g. from music schools. This cooperation is especially interesting from a music educational point of view, since it establishes new resources for diversity and cultural participation for a larger spectrum of learners (Emstad & Angelo, 2018; Jordhus-Lier et al., 2021; Krupp-Schleußner & Bartels, 2018; Kuuse et al., 2016).

An example from Germany is the programme *Jedem Kind ein Instrument* (JeKi). It was established in the German federal state of North Rhine-Westphalia in 2008 and implemented for primary schools in the Ruhr valley. The programme features cooperation between primary school and music school teachers, working in teams of two, for one lesson each week during the first year of school. In addition to elements of basic musical training it focuses on presenting musical instruments.<sup>4</sup> Children can pick one of these instruments at the end of the term and begin learning to play it the following years.

In contrast to inter-school teacher collaborations, JeKi positions teachers from differing professional backgrounds, with potentially

<sup>2</sup> This chapter builds and expands on Kranefeld (2013).

<sup>3</sup> The discourse makes inconsistent use of the terms collaboration and cooperation. We are using cooperation as a descriptive category and collaboration as a normative category.

In keeping with the programmes standards, learners were able to choose between a number of strings (bowed and plucked), winds (wood and brass) or keyboard instruments.

diverging objectives and methods, in an inter-institutional tandem. At the beginning of the project, this collaboration setup was hailed as being very innovative, which was combined with high hopes of resulting synergy and mutual benefit. Accordingly, the project homepage read:

Due to the complementing of each other's skills and the resulting benefits [of the collaboration], this allows for intense cooperation and ideal tutoring conditions for the children.<sup>5</sup>

Preliminary results from a study on JeKi<sup>6</sup> commissioned by the German Federal Ministry for Education and Research, however, do not substantiate these optimistic claims, as they seem to show a clearly one-sided role assignment within the pairs that had developed over the first years of the programme: According to Kulin & Özdemir (2011) more than 98% of music school teachers (MT)<sup>7</sup> said that organizing the music lessons was their sole responsibility. In terms of the actual teaching of the classes, 74% of respondents stated they were doing this on their own, despite another teacher being present. Statements made by primary school teachers (PT) in the same survey corroborate these claims. Results from a series of interviews conducted by Lehmann et al. (2012)<sup>8</sup> also justify this finding. They further indicate that there is hardly any coordination prior to co-taught classes, mostly due to a lack of time.

This entails the question of how teachers cooperate in co-classes, when the very requirements for successful collaboration, i.e., coordination and communication (Lütje-Klose & Willenbring, 1999), are mostly missing, but co-teaching still takes place, albeit sporadically: One in four teachers state they conduct classes with their respective co-teacher at times (Kulin & Özdemir, 2011). Therefore, this video study aims to analyse:

What are the formats of these classes when the co-teachers have not coordinated in advance? How do they implicitly and situationally assign tasks during class and how do the teachers cooperate in designing the learning arrangements?

<sup>5 &</sup>quot;Stiftung Jedem Kind ein Instrument" (www.jekits.de [13.04.2013]), translated.

<sup>6</sup> The Ministry established a research group to promote empirical research on education. For further information please refer to Kranefeld (2021) in this edition.

<sup>7</sup> In order to facilitate reading, music school teachers will henceforth be referred to as MT and primary school teachers as PT.

<sup>8</sup> The project partners conducted an interview study with the very teachers we videotaped.

In order to address these questions, we will first compile empirical approaches and research results concerning cooperation. Then, our qualitative approach will be explained in further detail, which results in the presentation and contextualisation of inductive observational categories and their corresponding interaction phenomena. The chapter closes with a conclusion and subsequent discussion of the central findings.

#### Research on classroom cooperation

Collaboration is connotated with a special potential when it comes to processes of school development (Keddie, 2015). Educational research mainly focuses on the collaboration of general education teachers and special needs educators. A central backdrop for these collaboration settings is the collaboration model by Cook & Friend (1995), which differentiates between station teaching, parallel teaching, alternative teaching and team teaching. It also serves as a heuristic framework in the following analysis. Empirical research on collaboration and cooperation between teachers developed in the wake of organizational psychology, particularly in German-speaking countries (Fussangel & Gräsel, 2012; Gräsel et al., 2006). The scope and intensity of co-teaching as a feature of effective schools as well as their impact on processes of school development are the subjects of debate (Idel et al., 2012). The existing empirical research faces two challenges: According to Idel et al. (2012) the discourse in the field of educational science on teacher collaboration is grounded on a normative approach, as seen, for instance, in the common use of ascending stage models, implying the existence of a highest or purest form of cooperation. Fussangel & Gräsel (2012) further point out that operationalization of cooperation in previous empirical studies has been inconsistent and that a basic theoretical comprehensive model (Fussangel, 2008, p. 115) is still missing. Research that systematically focuses on the microprocesses of co-teaching in class would be of particular interest for our research question, but has played only a minor role until now. This might be related to a phenomenon which was described in several studies: The closer cooperating teachers get to the actual teaching of a class, the less they collaborate (Idel et al., 2012, p. 14). Studies by Holtappels (1999), Gräsel et al. (2006) and data from a study on the development of day

schools (StEG) (Dieckmann et al., 2008) reinforce this view. The archetypical method for an explicitly classroom related view on cooperation is generally that of a survey focusing on the shape of concurrent variables embedded in larger standardized. Quantitative and qualitative interview studies represent further approaches. Fussangel delivered a paper in 2008 on the co-operation between (subject) teachers in learning communities, highlighting the teachers' subjective beliefs as individual prerequisites for co-operation. (Fussangel, 2008, p. 69). A number of (mainly qualitative) studies are concerned with the conditions and prerequisites for succesful collaboration between schools and music schools. Hanley (2003) stresses the necessity and importance of mutually agreed upon concepts and goals. An interview study with head teachers of both comprehensive schools and music schools by Emstad & Angelo (2018) identify shared beliefs concerning the value of music and music education as "key drivers" (p. 11) of their collaboration, which enable a mutual benefit of the cooperating parties.

Additionally, there are results from teacher surveys on their cooperation in JeKi-classes (Cloppenburg & Bonsen, 2012; Franz-Özdemir, 2012; Kulin & Özdemir, 2011; Lehmann et al., 2012). Research on teacher cooperation, however, rarely focuses on authentic classroom data, with some notable exceptions: Textor (2007) developed a structured observation form in the context of special education. It comprises aspects of teacher cooperation that fall under the category of organizing assistance (p. 155) in terms of teaching the classes. Frommherz and Halfhide (2003) conducted a study combining interviews and observations on co-teaching in lower grades of secondary schools in the city of Zurich. With the help if their tool, they were able to show different interpretations of team-teaching in the six pairs of co-teachers they questioned and observed. They could furthermore recreate their "roles" and their way of splitting responsibilities and tasks during classes.

# The GeiGE video study

To gain a better understanding of different cooperation formats during the first year of JeKi, seven pairs of co-teachers were examined within the framework of the GeiGE study.<sup>9</sup> They were filmed in up to six lessons in which they presented both string and wind instruments. The overarching goal was to reconstruct specific instructional patterns of action, including the aspect of working in pairs.

The foundation for collecting and evaluating the material was provided by the guidelines of interpretative classroom research according to Krummheuer & Naujok (1999). It connects approaches relating to interaction with conversation analysis, as described e.g. in Kranefeld (2017). The analysis was facilitated by the software atlas.ti. After watching the material once, we selected key scenes (Deppermann, 2008) in order to evaluate the aspect of cooperation. These key scenes were phases during which the PT were actively involved or intervened in class. The interactional criterion for these phases were limited and lasted from entry to exit of interactants (Krummheuer & Naujok, 1999, p. 69). Transcriptions for these key scenes complemented the video analysis. Preliminary observation of the material affirmed the diagnosis by Kulin & Özdemir (2011), in that joint JeKi-classes were held only sporadically. This led to a manageable number of key scenes that were subsequently compared and analysed. The analysis involved different types of lesson sequences, the length of which varied. In extreme cases, the PT played an active role during the entire class, e.g., while trying to play the instruments in small groups or moderating class debates. In other cases, the PT's intervention lasted only for a few seconds. In the following chapter, we will present the inductive assessment categories resulting from these analyses for assistance, one of the forms of collaboration put forward by Cook & Friend.

The assessment categories will furthermore be contextualised in compliance with Cook & Friend's (1995) theoretical systematisation.

The joint project Gelingensbedingungen individueller Förderung in Grundschulen in Essen (GeiGE, success conditions of individual support in Essen primary schools), established by the universities of Bielefeld (Prof. Dr. Ulrike Kranefeld), Münster (Prof. Dr. Martin Bonsen) and Hochschule für Musik und Tanz Köln (Prof. Dr. Anne Niessen), was conducted from 2009 to 2012, as a video-based sub-project in Bielefeld with scientific co-operation from Dr. Kerstin Heberle, Dr. Susanne Naacke and Melanie Schönbrunn.

## Assistance as a mode of cooperation

We were able to identify a prevalent approach to co-teaching after watching the key scenes: A form of collaboration that Cook & Friend (1995) would call *one teaching, one assisting*. The MT assumes the leading role in instructing the class and the PT assists. This dominating approach to co-teaching, i.e., *assisting*, shall be further elaborated on against the backdrop of Cook & Friend's model. The prevalence of *assisting* in co-taught JeKi-classes is no surprise, since it is the only way of co-teaching described by Cook & Friend (1995) that does not require previous planning and coordination in terms of content and methods.

# Who receives assistance? Co-teaching as part of the interaction triangle

The analogy to Cook & Friend's (1995) classification, however, presents a problem when it comes to interpreting JeKi-classes. As defined by Cook & Friend, the assisting teacher assists the students: "... one takes a clear lead in the classroom while the other observes students or drifts around the room, assisting them as needed." (Cook & Friend, 1995, p. 8) The students ("them") are clearly presented as the beneficiaries of the assistance. While analysing the video recordings of JeKi-classes, another element of assisting emerges; an element that is not featured in the above-mentioned definition. The leading co-teacher can benefit from assistance as well, albeit indirectly: The assisting teacher offers individual help for students, i.e., a way coping with heterogeneity, which at first glance corresponds to the definition by Cook & Friend. However, at the same time this is also assisting the leading teacher, who might be unable or unwilling to provide this support to the learners while also instructing the class. This sort of double-oriented assistance clarifies the need for including both teachers as well as the students when it comes to reconstructing directions of assistance: All three comprise an interactional triangle, with the assistance possibly running along one of its three sides, or possibly along two sides at the same time. When assisting in JeKi-classes, the PT serves as a mediator, directing assistance at either students or the co-teacher. In some cases though, this is also an assistance for the other party. Which

side of the triangle is emphasised most depends on different factors, some of which could be reconstructed in the analysis of the video data. These factors are tied to the interactional framing of assistance. It is important to keep the *range of assistance* in mind: Does the teacher whisper a piece of information to an individual student or to a group of students, or does the teacher interject an explanation directed at the entire class? Their position in the room and, thus, during class, is relevant here: Varying examples of how the PT reacts to students sitting in a circle, initiated by the MT, are visible in the video samples. In case the PT is positioned outside of the circle and interferes from the outside, their assistance usually weighs heavier and receives more attention than a PT's interjection from within the circle, where they would be regarded as active participants anyway. In this scenario they can embody two different roles: Either they take part in the activity just like a student, or they act as an instructor, i.e., disciplinarian. Apart from the direction and position of origin of any given assistance, the subsequent reaction to it is also relevant: How are assisting activities included and integrated in the lesson by teachers and students? What are the implications for the continuing process? Do these activities happen simultaneously in the background, are they meant to complement the lesson? Or do they interfere with the process planned by the MT and force the MT to halt the process – and maybe even alter the course for the remainder of the lesson?

Cook & Friend (2004) envision an ideal scenario in which an assisting teacher *drifts* through the classroom and offers "unobtrusive assistance" (n.p.), meaning assisting in a decent, inconspicuous and laid-back way. If, however, the assisting teacher addresses the entire class (not uncommon in JeKi-classes), thus, interrupting the MT, the impression is that the assistance is directed at the teacher and not the students, representing a shift within the interaction triangle.

An example for this kind of short-term assistance at a micro level is provided by a sequence we called "The right hand", taken from a lesson during which the violin is introduced:

The MT wants to show the students how to hold a violin bow. The children stand behind their desks which are arranged traditionally in several rows. The MT stands at the top of the classroom, facing the students. The PT, a special

educator in this case, stands behind a boy, presumably a child with special needs, and offers movement support during the following exercises. The exercise starts with the MT asking the children to raise their right hand. Some get it right and raise the right, some raise their left. The MT helps them by pointing to some of them individually and saying "right" or "wrong". After a while she points to a girl and says: "Marie: Wrong." The PT then says to the girl: "The hand you use for writing." The MT picks this up and adds: "Yes, exactly." She then immediately turns to the next student to tell him he did right and continues correcting the others.

It is particularly interesting to see how this is embedded into the continued process of the lesson. The MT reserves a *clear lead*: She may have to pause shortly, but her affirmative comment ("Yes, exactly") and her smooth transition back to correcting the other students demonstrate she is still in control of the process. The PT's interference does not represent an interruption of the process due to the MT's quick reaction in contextualising the comment. Another important factor seems to be the location of the PT in the classroom. She plays an active part in the lesson, i.e., she stands behind and supports the boy with special needs. She does not assist from the outside. She also clearly addresses the girl directly ("you use"<sup>10</sup>). Unlike her assistance to the boy with special needs, whom she helps subtly and discreetly by standing behind him, her comment towards the girl has a wider range as a result of the physical distance. This means her advice could potentially benefit other students and also complement the MT's instructions for the class. Analysing the example "The right hand" makes it possible to locate this act of assistance at a micro level of the class process within the triangle of interaction.

Due to its double orientation, assisting as a mode of collaboration can be easily disrupted. Statements from teachers during an interview study by colleagues in Cologne, Niessen & Lehmann (2011) reveal this proneness to disruption when they ask: Who is being observed? Friend et al. (2010) consider observation as a type of collaboration (one teach / one observe). They combine it, however, with previously coordinated and clearly defined goals, e.g., collecting systematic observational data

<sup>10</sup> In German, the 2<sup>nd</sup> person singular is not as commonly used for generic statements as in English.

on individual students. The MT from the Cologne study stress the other side of the triangle of interaction as well. They feel like being the focus of observation by the PT if "the co-teacher [...] just sits in silence [...]. Does she observe the children or me?" (Niessen & Lehmann, 2011, p. 11 et seq.)

The fact that this mode of cooperation is prone to disruptions also becomes apparent in cases where one of the co-teachers loses the *clear lead* and no alternative cooperation mode is established, like team-teaching. In one case students struggle with a conflict of loyalty: While the MT lays out her instructions, they look towards the PT who plays a passive role in this situation. They look for her approval before following the MT's instructions. This can be indicative of the MT having lost her *clear lead* even though she has just laid out her instructions, the very action of which usually signals authority but which the students fail to ascribe to her.

These questions of *Who receives assistance?* and *Who is being observed?* show assisting is not necessarily a bilateral interaction. It is rather entwined within the triangle of interaction: MT-PT-class / individual students. Adding the above-mentioned aspect of *range*, the class now splits into different dimension, depending on whether one student, a group or the entire class is the recipient of assistance.

#### Assisting as a means of complementing skills?

Successful collaboration by means of *complementing skills* represents a hope expressed by the initiators of the JeKi foundation (v.s.). It requires coordination among the co-teachers in terms of their respective tasks and in accordance with their experience and formal education. In first-year JeKi-classes, there are tremendous variations, e.g., in skilfully handling larger study groups. MTs are usually trained in teaching instrumental skills and elementary music and are, thus, better suited for teaching small groups or one-to-one lessons. In interviews, they openly talk about their problems teaching an entire class (Lehmann et al., 2012). The PT who is potentially skilled in developing and managing arrangements for bigger groups remain passive for the most part and let the MT assume responsibility for the class. This leaves hardly any room for complementing each other's competences, partly due to a lack of coordination.

For video analysis the question of how complementary skills become visible during the lesson, maybe boosted by the above-mentioned cooperation mode *assisting*. Do situations occur in which the PT is mostly complementing the MT's skills, i.e., situations of intuitive, unplanned, and rather one-sided complementation at an active level during the lesson? To analyse this further, sequences of intense interaction were taken from key scenes on *assisting* as a cooperation mode. These were sequences in which the PT intervened<sup>11</sup> without asking during a phase that was up until that point under the sole responsibility of the MT. An impulse for intervention is usually triggered by an observation of something that is considered problematic and leads to impatience in the observer. This may indicate that the PTs could potentially feel the need to defuse or resolve a problematic issue by their intervention.<sup>12</sup>

## Functions of intervening

Beyond the procedural dimensions of intervention categorized in 3.1 (range, position in the room, impacts on the process), the functions of intervening represent a particular interesting point when it comes to aspects of complementing teachers' skills. These aspects may help identify possible areas in which complementary co-teaching may be observed in the first place, albeit with a limited range. They could also point to situations where the PT may feel the need to add something relevant to the situation. This is a rather indirect analysis pertaining to a one-sided complementation of skills.

#### **Translations**

The above-mentioned example of "The right hand" can be regarded as a short-term way of intervening: What caused it? Apparently not all children can discern left and right. By adding "the hand you use for writing"

<sup>11</sup> In the Cologne interview study, PTs stated they occasionally feel the need to intervene directly in the JeKi-class (Niessen & Lehmann, 2011, p. 11).

<sup>12</sup> There are, of course, different constellations of co-teachers. Whether the PT herself teaches music or not is an important factor.

the PT offers advice in addition to the individual feedback provided by the MT, even though her advice applies only to the right-handed children. She serves as a sort of "translator" for the children. *The right hand* becomes the *hand you use for writing.* The PT assumes the role of a mediator who ties the content more closely to the students' learning experience. This could be a potential area of expertise relevant to complementing skills.

### Disciplinary intervention

The main reason why PTs intervene is to deal with disturbances. They react and discipline individual students, a group, or the entire class. In some co-taught classes, the MT and PT habitually split their responsibilities like this: the MT teaches, the PT assists with disciplinary measures.

At first glance this seems to be a viable way of complementing each other's skills as defined by the initiators of the programme. The MT as the expert for the subject matter receives assistance from the PT, who is trained in handling large groups. The PT, provided she is the main teacher or a subject teacher of the class, knows her students and may be better suited to assess whether an intervention might be required. This often happens in the background during the lessons we sampled. The student in question gets reprimanded or sometimes relocated within the classroom. The PT further knows the rules of conduct which play an integral part for all classwork, especially in the first year of school. The MT only teaches one lesson per week and is, thus, less familiar with the children.

As plausible and pragmatic as it may seem, considering the lack of prior coordination in terms of method and content, this way of splitting the work still comes with major disadvantages: Disturbances in the classroom can only be dealt with reactively. Proactive strategies that seek to avoid disturbances among larger groups in the first place, including basic learning arrangements, usually require planning in advance. The PT's experience in handling large groups needs to be part of the planning of the class in order to be effective when the need arises. In fact, analyses of classes taught by MT reveal difficulties, especially in areas that Nolting (2007) describes as strategies for preventing disturbances in the classroom: Difficulties in establishing rules, maintaining the flow of the

class, or broadly activating the students. What could be seen as complementation of skills at first (*one teaching, one disciplining*), may actually be a situational approach to compensating basic problems. This way of splitting the work can also contribute to conflicts of loyalty or leadership (v.s.). A PT's remark during the interview study underlines this: "It's somewhat unfortunate if one teacher teaches the class and the other just serves as a disciplinarian. It means I chip away at their authority" (Lehmann et al., 2012, p. 201).

#### **Facilitating communication**

An integral part of the lessons we analysed was the presentation of instruments, their construction and playing techniques. MTs usually prefer talking to the entire class, which frequently narrows the conversation since students are required to come up with the correct answer, e.g., naming a particular component of the instrument correctly. A cognitive stimulation of a larger group of learners is, thus, stifled.<sup>13</sup> Such *guessing games*<sup>14</sup> entail either phases where students try and guess the correct answer, each incorrect one accompanied by a negative evaluation from the MT, or the phase is cut short by an early correct answer, thus, ending the guessing game prematurely or unexpectedly. The MTs choose different strategies in such cases. Sometimes they just ignore the student who came with the right answer, ergo creating confusion among the class.

The following excerpt taken from a class sequence is an example of the PT reopening the conversation, thereby assisting the MT. The situation is particularly delicate because the student "threatens" not only to cut short the guessing game, but his answer would also pre-emptively resolve one of the essential topics, if not the central topic, of the class, i.e., the question of how to differentiate between a viola and a violin. The co-teachers in our sample are special in that they periodically try and moderate the communication with the class together. Another important

Several video studies have revealed the issue with communication that is too constricted, such as the TIMMS video study (e.g., Klieme & Baumert 2001).

<sup>14</sup> Carla Schelle (2010) illustrates a similar case that occurred during music lessons in the 7th grade in the chapter "Ratespiel statt didaktischer Strukturierung" [Guessing games instead of instructional designs] (p. 121).

feature is the fact that the PT in this case also teaches music and, unlike the MT, knows how to play a violin.<sup>15</sup>

At the beginning of the sequence, the MT presents a viola to the class. They have discussed the violin during the lesson before:

MT: holds up a viola. What's this? They say, it's another violin.

S1: raises his hand. That's a-

MT: Yes, Matthias. *Hands the viola to the PT*.

S1: That's a viola.

PT: What's a viola? Sits down, holding the viola.

S1: A viola is like a violin, just bigger and so the sound's deeper.

MT: nods.

PT: Let's see if Matthias is right, eh? Places the viola on her shoulder and plays the two top strings  $A_4$  and  $D_4$ . Sounds the same, doesn't it? Looks towards the students; another student raises his hand. Noah.

The student acts as an expert child. For a first-year student his contribution is not only highly persuasive regarding content and speech, he also correctly names the instrument and provides a definition of the same on demand. The MT nods in agreement while the PT reopens the sequence and simultaneously establishes a higher level of cognitive stimulation with her two remarks (*What's a viola?* and *Let's see if Matthias is right, eh?*). It is not about quizzing the students on matters of previous knowledge anymore, but to hear if the viola actually has a deeper sound than the violin.

Central *functions of intervening* that could point to an area of potential skill complementation in our sample are: (1) Translation, i.e., connecting the task to the students' learning experience, (2) support in handling the class, and (3) facilitating communication.

Analysing these *functions of intervening* does not necessarily lead to definitive results; in fact, it sparks further questions that can be pursued

Hence the PT is the technical expert, i.e., violinist in this case. Furthermore, another imbalance becomes apparent regarding the complementation of skills: The MTs normally present 15 different musical instruments during the school year. Since they rarely play all 15 of them themselves, they cannot, technically, be regarded as the expert in these cases. To accommodate this, we characterized them as "native vs. non-native players" in our sample.

in detail against the backdrop of the expert paradigm in professionalization of teaching (cf. Berliner, 2004; Blömeke, 2002; Bromme, 1992; Krauss, 2011). Do MTs exhibit features not unlike those of "novices" or student teachers when it comes to dealing with large groups and moderating debates in JeKi-classes and is it due to their new field of work? While further analysing the material, these difficulties MTs face in handling large groups and structuring the lesson seemingly suggest this. <sup>16</sup> The PT and the MT also made similar remarks in the interviews of the parallel cologne project mentioned above (Lehmann et al., 2012; Niessen & Lehmann, 2011). The question of whether it makes sense to translate the idea of complementing skills into an expert–novice-relationship must be differentiated due to the following reasons:

- (1) In the field of research on professionalization, professional experience does not automatically equal expertise (cf. Krauss, 2011). Attaching the status of expert to the PT just based on her active time on the job would be questionable.
- (2) Our analyses are inevitably "one-sided" since the PT's teaching (aside from her assisting in class) is usually not at our disposal. The MT represents the focus of our analysing due to the fact that she is responsible for teaching the lessons. Any PTs harbouring a novice relationship towards educational or technical aspects remain invisible, even though they are mostly unfamiliar with the taught subject.
- (3) Possible characteristics of being a novice has only been described for specific segments of the MT's educational expertise. Aspects of handling the class, moderating and some questions of instructional designs were prioritized, less so their subject-related or general educational expertise.
- (4) Ophardt (2008) separates patterns of orientation from patterns of action regarding the question of how to identify an expert. Whereas the former can be reconstructed in interviews, the latter

<sup>16</sup> The GeiGE video study housed another evaluation perspective that conducted a problem analysis, categorized under "unused study time". It dealt with managing transition phases during the lesson, communication, how to phrase work assignments, delays in class etc.

are observable, i.e., with video analysis we can only examine patterns of action. One area of educational expertise, however, e.g., handling larger groups, can be registered as an aspect of classroom management, especially via the performance in interactive settings. Videotaped lessons are particularly suitable for this purpose (Ophardt & Thiel, 2007, p. 142).

When contrasted with the constellation in the second phase of teacher education in Germany (student teacher – mentor), these issues become even clearer: The relationship between the expert and the novice is seen here as constitutive. The asymmetric expertise creates the opportunity for constructive mentoring. In JeKi-classes this opportunity is rarely seized, sometimes due to reservations, a primary school teacher notes: "We don't want to say too much. Nope, we don't want to play the schoolmaster." (Lehmann et al., 2012, p. 201) Instead, PTs feel displeased, impatient, or feel the need to intervene in their co-teacher's lesson. This lack of reflection on their different set of skills regarding certain areas of educational expertise exacerbates a situation of co-teaching that is easily disrupted in the first place (Gräsel et al., 2006).

#### Conclusion

It has been shown that questions regarding possible formats of cooperative teaching as well as implicit and situational division of tasks can be tackled with a video-based approach, enabling a more profound perspective on teacher cooperation in JeKi lessons. Corresponding to Cook & Friend's model of cooperation (1995), we were able to identify the format of *one teach – one assist* as the predominant form of cooperation in our key scenes. The value of this study lies in the subsequent microanalyses of these scenes, which added to a processual and content-related understanding of "assisting" as a form of cooperation. In the wake of these analyses the need to expand the definitions of Cook & Friend became apparent. The assisting processes while co-teaching the first JeKi term showed a direction of assisting not only towards the learners, but also – possibly indirectly – amongst the teachers. This hints at a reciprocity of assisting

which demands a closer inspection and description of assisting processes in an interactional triangle. Our analyses also uncover nuances of these processes, depending on the range of assistance as well as the position in the room in terms of this triangle. Furthermore, differing attributions of meaning are ascribed to the assisting processes, both of learners and of the co-teacher, in the specific interactions. In addition to the processrelated aspects, we could also identify content-related phenomena. In the context of interventions, we described the functions of these processes and their effects on the resulting interactions: Translations, Disciplinary Interventions and Facilitating communication. These functions of intervening indicate an imbalance concerning possible "skill complementation" (v.s.) among the co-teachers, one of the defined objectives of the JeKi-programme. It furthermore became clear that just having two teachers in the classroom does not automatically lead to co-teaching or 'co-construction' (in line with results by Gräsel et al., 2006, p. 210). The reasons why co-teaching is so rarely implemented for individual assistance or differentiation of tasks cannot be discerned based on video analysis, but in surveys teachers usually pointed to a lack of time for prior coordination (Cloppenburg & Bonsen, 2012; Lehmann et al., 2012).

Methodically, video analysis is well-suited for reconstructing coteaching processes at a micro-scale and, thus, offers a contribution to classroom research on cooperation that examines authentic cooperation experiences. In contrast to transcripts, video-based research allows for the establishment of observation categories such as *Position in the room* (v.s.) or the reconstruction of the above-mentioned conflict of loyalty in the student since it simultaneously captures space planning (Dinkelaker & Herrle, 2009, p. 52) and the directions students and teachers are facing.

Regardingtheexpectations of reflexive teacher training, the ability to challenge one's own professional understandings, think multi-perspectively, react flexibly and reflect on one's own classroom practice are central demands (Schön, 1984) that are also imperative from a music specific point of view (Angelo, 2016). The analyses of this study could provide opportunities for reflection regarding co-teaching settings, as well as general video-based music teacher training material.

Interpretative classroom research specifically tailored to co-teaching remains a desideratum given the upcoming institutional changes that aim to increase inclusive classrooms for all educational subject matters (Prengel, 2006). Suggestions for further research include translations of the results into professional training purposes and other practical forms of use.

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