Innovative practice as interpretative negotiation: a case-study on the kamishibai in Kindergarten

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ABSTRACT Much research on educational innovations treats them as purposeful endeavours, initiated with a clear goal for improvement of practice and eventually evaluating the fidelity of their implementation as well as effectiveness. However, innovative practices in schools can have many sources and their implementation often takes a surprising and unanticipated course. In this article, we present a case study reconstructing the dynamics of an innovation that was initiated by an individual Kindergarten teacher—the introduction of an educational artefact: the kamishibai—but eventually made its way into the school as a whole. Using interviews and observations, the study demonstrates the central role of interpretative negotiation in the implementation processes of educational innovations. It disentangles the interplay of individual and collective sense-making, characteristics of the innovative artefact as well as local policy decisions. The study reveals how the meaning and the possible use of educational artefacts change and develop over time in response to changes in the organisational context

Introduction

Much research on educational innovations still treats them as purposeful endeavours initiated with a clear goal for improvement of practice and eventually evaluating whether the implementation was enacted as planned and intended. This reflects the so-called ‘fidelity-approach’ (Snyder et al., 1992). However, innovative practices in schools can have many sources and their implementation often takes a surprising and unanticipated course. Contextualised sense-making is key to understanding those dynamics (Fullan, 2016; März et al., 2013). Yet, however important the factors agency and sense-making in unravelling implementation processes, it is also crucial to acknowledge the role and impact of structural and material elements (März et al., 2016). For that reason we have in our recent work broadened the theoretical and empirical lens of our research on the implementation of innovations and included explicit attention for the part played by artefacts in it (see, e.g. März et al., 2017; Vermeir et al., 2017).

Figure 1. The kamishibai. From ‘Hoe vertel je een kamishibai?’ by Art Basics for Children, (n.d.), Copyright Art Basics for Children

In line with that shift, this article presents a case study that combines the attention for sense-making as well as artefacts in the implementation of educational innovation, arguing for the central role of interpretative negotiations in this process as it evolves in time (Kelchtermans, 2017; Vermeir, 2019;

Vermeir & Kelchtermans, 2020). The study was part of the PhD-research by Karen Vermeir. In this article we have translated and elaborated the original reports in Dutch (Vermeir, 2019; Vermeir & Kelchtermans, 2020) for an international audience. In fact, we reconstructed an innovation that was initiated by an individual Kindergarten teacher and eventually made its way into the school as a whole. The artefact at hand is the kamishibai. Originating from Japan, the kamishibai looks like a little wooden theatre in which pictures are shown (see Figure 1). It is used to support storytelling practices as part of language education (Ishiguro, 2017). The choice for a single case study allows us to unpack the complex and contextualised dynamics of sense-making and negotiation through which the innovative potential of the artefact is translated to and enacted in the organisational conditions of a school. The study reveals how the meaning and the possible use of educational artefacts change and develop over time in response to changes in the organisational context, thus contributing to a more contextualised understanding of educational innovations as well as the role of individual and collective interpretations and negotiations by the actors involved.

Below we clarify the conceptual framework that guided our study, as well as the methodology used, before presenting the findings on the implementation practices of the artefact.

Conceptual framework

Innovation and implementation

Although most research on educational change focuses on policy implementation, it shouldn't be forgotten that the initiative to alter practices may also work bottom-up, coming from teachers in the school. In order to qualify as educational innovation, these change efforts have to be motivated by a concern to improve educational practice. Or, more formally defined, we understand educational innovation as the process of Figure 1. The kamishibai. From 'Hoe vertel je een kamishibai?' by Art Basics for Children, (n.d.), Copyright Art Basics for Children purposefully changing teaching and learning practices or the conditions which determine their actual form with the intent to improve the education of the students (Kelchtermans, 2018). The emphasis on improvement inevitably adds a normative dimension to the change, raising the question of the criterion to consider a change as better than the former practice: better for whom?, better in what way? Choosing to actually engage in innovative practices therefore also implies taking a normative stance. Furthermore, innovation is also understood as in essence a process of enactment (Ballet al., 2012). In fact, innovation is often defined as encompassing three phases: adoption, implementation and institutionalisation. The adoption phase refers to the decision to accept the innovative goals and the commitment to start putting them in practice. The actual enactment of those goals in teaching and learning practices is referred to as the implementation process, constituting the core of educational innovation. With the arrival of the institutionalisation phase, the innovation actually stops because the new practices have become so self-evident that they operate as the 'new normal' (Giles and Hargreaves, 2006). Researchers' attention has centred on the implementation phase. Yet, understanding the actual enactment of the innovation remains a complex challenge, not in the least due to its contextualised nature: innovative ideas always have to be translated to the specific social, cultural, material and organisational context of a particular school. Hence, understanding the sense-making of the innovation by the local practitioners involved is central to understanding implementation processes (Fullan, 2016; Van den Berg, 2002).

Individual and collective sense-making

Sense-making is done by individuals, but—as it involves interaction with others—it also needs to be understood as a social and collective process. To analytically unpack the process of individual sense-making, we draw on Kelchtermans' concept of personal interpretative framework: 'a set of cognitions, of mental representations that operates as a lens through which teachers look at their job, give meaning to it and act in it' (Kelchtermans, 2009, p. 260). It includes both the understanding an actor has about him/herself as an educational professional at a certain moment in time (i.e. professional self-understanding), and the personal knowledge and beliefs about teaching that they use when performing the job (i.e. subjective educational theory). The personal interpretative framework needs to be understood as not only conditioning individual sensemaking but also as the dynamic outcome of the ongoing meaningful interactions with others over time.

Sense-making is not only an individual process, but also happens collectively, in interaction with others (Coburn, 2001) and eventually results in the so-called organisational culture of the school: a more or less shared view among the school staff on what constitutes good education and how it can best be achieved in educational practices. This collective system of values and norms serves as a guideline for the daily functioning of the school as an organisation (Schein, 2004). The personal interpretative framework and the school culture thus, respectively, operate as individual and collective interpretative filters in the sense-making of innovations as well as influence their enactment in implementation practices (Kelchtermans, 2018).

Interpretative negotiation as a core process

As already indicated, the individual and collective sense-making in implementation processes are not neutral. The inherent claim for improvement in an innovation implies that its enactment inherently reflects value-laden choices. Teachers' interpretation of the innovation requires assessing its desirability and consequences for practice (for example, by comparing its values and norms to the ones held individually or collectively as part of the school culture), as well as taking a stance to what extent and how they will build their practice on it. This evaluative sense-making does not automatically lead to compliance or adoption, but may also result in selective use or even dismissal and resistance. For that reason, we have argued that teachers' sense-making of an innovation—as reflected in their implementation practices (or their resistance of the implementation)—is best understood as the outcome of interpretative negotiation processes (Kelchtermans, 2017,2018; Vermeir et al., 2017).

The word 'interpretative' refers to the dynamic of sense-making. The call for change (as it is contained, for example, in artefacts) is interpreted and judged by teachers from their own personal interpretative framework and their school culture. The word 'negotiation' emphasises that this interpretation process is not a neutral matter of correct information, of being able or willing to apply and implement a regulation. Every call for educational change inevitably sends the normative message that current practices are no longer the most desirable that the proposed innovation constitutes an improvement and thus calls teachers to subscribe to that view. As such the call for change also includes issues of power and influence and the response from the teachers in the school reflects micropolitical and strategical considerations (Blase & Björk, 2009; Kelchtermans, 2007; Kelchtermans & Vanassche, 2017).

Artefacts as innovations

Educational innovations often enter schools in the form of artefacts: instruments, objects, (administrative) procedures, didactic materials, etc. that have been purposefully developed

with specific goals and intentions in mind to change and improve practices (Gagliardi, 1990; Suchman, 2003). In line with our earlier research (Vermeir et al., 2017), we don't treat artefacts as simple neutral objects, but rather as 'incarnating' particular normative beliefs about how it should be used, what purpose it may serve, etc. (see also Gagliardi, 1990; Scott, 2014; Suchman, 2003). Artefacts are therefore always imbued with some script (Suchman, 2003) that imposes itself on the potential users. In other words, when innovative artefacts enter schools, they call on school team members to act in line with this script and as such require them to take a stance.

Despite their omnipresence in schools and innovations, artefacts are still little studied in research on educational innovations. In a former study, we analysed the implementation of a strongly scripted, administrative artefact (März et al., 2017; Vermeir et al., 2017). The kamishibai has, of course, its historical script in Japanese culture, but is at the same time much more open, allowing for a wider range of forms of use (Ishiguro, 2017). Yet, its introduction in the school still represents the materialisation of a call for change. As such, the kamishibai metaphorically operates as a material, non-human actor, with whom the other—human—actors interact and negotiate in their implementation practices (Fenwick & Edwards, 2011; Scott, 2014). The purpose of our study is not to evaluate the educational and innovative potential of the kamishibai per se, but rather to use this case to deepen our understanding of implementation practices in educational innovation, in which human actors, material artefacts and structural working conditions (school as organisation, local policy) interact.

Research questions

This study strives for an in-depth understanding of the implementation practices of an innovation. These practices are seen as the outcome of contextualised interpretative negotiation processes between the actors in their organisational context on the one hand and an innovative artefact on the other. Furthermore, by documenting the implementation practices over a longer period of time, our analysis also aimed at unravelling the implementation as a process.

More specifically, the following research questions guided our study:

- Which interpretative negotiation processes characterise and explain the implementation of the artefact?
 - What is the role of individual and collective processes of sense-making?
 - What is the role of organisational working conditions?
- Which elements are constitutive for the process of interpretative negotiation?

Methodology

In line with our research questions, we chose to do an interpretative single case study of the implementation of the kamishibai within one Kindergarten. Our choice reflects theoretical sampling (Patton, 2002; Yin, 2018), as we were looking for a case that would allow to collect rich data on (i) the interpretative negotiation processes, (ii) the implementation of artefacts, as well as (iii) the role of the organisational conditions (context). Since the implementation of the kamishibai in that school had already been going on for six years at the time of the data collection, this case also offered an interesting opportunity to reconstruct the implementation practices over time (März et al., 2017; Vermeir et al., 2017). Finally, limiting ourselves to a single case study allowed us to make a real in-depth analysis of the complex and contextualised processes (Yin, 2018).

Data collection

All participants were informed in advance about the purpose of the study, the process of data collection and analysis. They were further guaranteed anonymity through the use of pseudonyms for school and respondents. After that, an informed consent was obtained from all participants.

The data were collected within the Kindergarten department of a primary school in Flanders (Belgium).¹ We collected data from three respondents (see Table 1): two teachers—responsible for, respectively, the youngest (Tara) and the oldest children of the Kindergarten (Tilly)—and the special needs teacher (Tessa). Tessa's responsibilities include the local policy on special needs, providing specific care for individual children as well as supporting other teachers in their special needs education. As such, the data from Tessa's interview not only provided insights on classroom practices but also on the school's local policy. Apart from enriching the data set, this multivocality from respondents with different responsibilities contributed to the validity and credibility of the study (Tracy, 2010).

Table 1. Overview respondents.

Respondent	Function	Age	Experience in education (in years)	Qualification(s)
Tara	Kindergarten teacher	42	>20	Kindergarten teacher
Tilly	Kindergarten teacher	40	>15	Kindergarten teacher
Tessa	Special needs teacher	46	>25 (last four years as a special needs teacher, before as a Kindergarten teacher)	Master in Special Education Kindergarten teacher

Note. All names are pseudonyms.

The data collection involved observations, interviews and document analysis. We first observed classroom practices where the kamishibai was used in story-telling (Patton, 2002), making field notes that gave a detailed, non-judgmental description of the event (Marshall & Rossman, 2006). The observations thus provided a sense of the actual practices the teachers talked about in the semi-structured interviews (Kvale, 1996). The in-depth interviews aimed at reconstructing the entire implementation process (six years), with respondents who had different roles in that process, as well as complementary responsibilities in the school team. This way the interviews allowed for a 'thick description' of the implementation process, which was further enriched by the observations and document analysis (triangulation; Yin, 2018).

Data analysis

The field notes from the observations were written into vignettes in which the storytelling practice with the kamishibai was described. The audio-recordings of the interviews were transcribed verbatim (Kvale, 1996) and coded. The interview transcripts were divided up in meaningful text units and concisely summarised by one or more codes describing their content (descriptive coding; Charmaz, 2014). Code-links were made to the observation vignettes whenever relevant. In a second round of coding, we used the key concepts from the conceptual framework to label the transcripts (interpretative or theoretical coding; Miles & Huberman, 1994).

The analysis of the data consisted of several steps: a within-case analysis for each respondent and a cross-case analysis across the respondents (Miles & Huberman, 1994). Throughout the entire analysis,

we applied the principle of constant comparative analysis, whereby we consistently and systematically looked for similarities and differences within and between respondents and between data and theory (Charmaz, 2014).

Results

In the presentation of our findings, we start with a descriptive reconstruction of the implementation practices on the kamishibai, followed by a more analytical interpretation.

The implementation process: incremental negotiations and redefinitions.

The analysis of the data revealed how the meaning of the artefact evolved as different additional layers of meaning were added to the artefact over time, which impacted the implementation practices. Below we present the chronological thickening in the meaning of the kamishibai and its implementation.

Attractive tool to bring variation in storytelling methods

Tara accidentally discovered the kamishibai while watching a television programme. She immediately saw merit in the artefact, more in particular as an attractive didactic tool to create more variation in her storytelling pedagogy. So at first, the adoption and introduction of the kamishibai were the initiative of one teacher in her own classroom.

Instrument with various educational and didactic benefits

Through the actual use of the kamishibai in her class as a storytelling tool, Tara was not only confirmed in her initial evaluation of the artefact's innovative potential but came to see even more educational benefits. For example, she noticed an enduring and heightened level of concentration in the children during the story-telling. She attributed this effect to the continuous visual input, as the prints supporting the oral story-telling remained visible throughout the story:

The first time, that was kind of magic . . . the children were like, absorbed by the image. And I thought, actually, it has the same effect as television: the thing remains in place and everyone keeps looking at that same thing. While, when you're telling a story with a book, no matter how hard you try, it always moves, but the kamishibai stands still and then they concentrate on that.

As such Tara's evaluation and interpretation of the kamishibai were also based on the children's (non-verbal) reactions, which for her provided evidence and justification for its educational value.

Tara also noticed a gain in classroom management: children were more calm during storytelling with the kamishibai, and so it was easier for her to intervene on distracting behaviour as she literally had her hands free:

There's a quarrel, you see snot hanging on someone's nose . . . And you can get up, help children out. While the rest of them can continue to watch.

Tara's reflective analysis on the experiences with the kamishibai in her classroom revealed congruency between the educational potential of the artefact and the normative beliefs in her personal interpretative framework. She came to see how the kamishibai actually fitted in with her personal views on good education. This insight, based on her experiences, resulted in an adjusted and refined definition of the kamishibai and its educational potential, which in turn added to its value and legitimacy for Tara.

Tara shared her positive experiences with the kamishibai with her colleagues, explaining its benefits and inviting them to try and use the artefact themselves. As her colleagues started to occasionally use the kamishibai as well, they also came to understand and acknowledge its rich potential as a didactic tool. However, their enthusiasm and eagerness to use the artefact differed and initially not all team members actually implemented the kamishibai (or only did so in a limited way): 'At that time I used it very irregularly. It was like twice a year that I told a story with the kamishibai. It was not as systematic as I am using it is now' (Tilly).

The limited implementation of the kamishibai could be explained by the fact that not all team members felt an urgent need to change their habitual story-telling pedagogies. Further, the teachers were not familiar with the storytelling pedagogy with the kamishibai and that was a kind of 'threshold of the new': 'A bit uncertainty: will I succeed, will I not succeed?' (Tess). And finally, the implementation was hindered by material limitations, like the limited number of usable prints, and the fact there was only one kamishibai available in the school—Tara's.

Well, not having a kamishibai in each class and having to borrow it every time . . . That doesn't work. That's always a hassle, because everyone wants to tell a story at the same time, at the end of the day. (Tara)

As a result, the cost–benefit balance of the investment (time, energy) needed from the teachers turned out negative. Despite the fact that the team members perceived the potential of the artefact as congruent with their personal beliefs, this pedagogical benefit didn't outweigh the cost. In other words, their interpretative negotiation with the innovation resulted in a limited implementation at that time.

Political instrument

The next layer of meaning on the kamishibai originated from the local school policy at the level of the school cluster.² The school in our case-study belonged to a cluster of schools who all had significant numbers of pupils with a non-native speaking family background. For that reason, the school cluster launched a new local policy on language development, involving compulsory professionalisation of the staff as well as requiring each school to come up with (and engage in) additional innovative efforts to stimulate language development. As a response to this call for additional action and efforts, the Kindergarten team realised that the kamishibai held relevant and powerful pedagogical potential to meet this local policy requirement.

The call came to engage in the language stimulation project. . . . So we had to come up with a solution or a plan for that in the school . . . And then I think I brought up the story of the kamishibai at one of the staff meetings and . . . well, [colleagues thought] yes, this is a good idea. (Tara)

Tilly corroborated this story: 'In the meantime, everyone had already started using it [the kamishibai], and so it didn't feel like an additional compulsory thing, but rather: well, since this is already going on in our school we might as well include this as part of our project on language stimulation.

'Consequently, the kamishibai gained significance as a policy instrument, to respond to the new requirements from the local policy, without increasing the teachers' workload. In other words, the teachers from the Kindergarten used the kamishibai politically to live up to the local school policy (and as such safeguarding their legitimacy as a loyal member of the school cluster) and to do so in a cost-efficient way, as it didn't require them to put in much additional time and effort. This stance was also congruent with the views on language education that had been shared by the staff for a longer period of time (school culture): 'Within our language education policy . . . , we have always stressed that

listening and speaking were the key competences. And so, we concluded that the kamishibai was definitely an action that we had to include' (Tess).

So, the policy call for new initiatives on language education intensified the interpretative negotiation process between the actors and the artefact, resulting in a redefinition of the kamishibai as a potential political answer to the policy pressure. The kamishibai was no longer a purely pedagogically and didactically valuable tool, but also an instrument to achieve their school-specific language education policy, while at the same time, a strategic means to be loyal to the school cluster (allowing them to maintain their legitimacy with a minimal increase in workload). On top of its potential to achieve educational goals (substantial use of the artefact), the kamishibai also became used for strategic purposes.

Moreover, this strategic use of the kamishibai even had an impact on the substantive use. Firstly, the decision resulted in an increased use of the kamishibai in the classes. This was partly because the school team determined—as an answer to the language stimulation policy—a minimum frequency of use of the kamishibai in every classroom (at least twice a month). But this requirement further provided the teachers with a strong argument to demand additional investment to ensure that every classroom would have its own kamishibai (instead of having to borrow one).

Secondly, the strategic use of the kamishibai resulted in a formalisation of storytelling practices with the kamishibai. Not only was a minimum frequency set for the use of the kamishibai, the school also developed a 'growth path' on language education through activities with the kamishibai: 'Just to avoid that the children would have to do the same kind of things with the kamishibai for the three years they were in kindergarten' (Tess).

So, the concrete use of the artefact also resulted in the creation of other artefacts (i.e., the 'growth path'), around which new organisational routines developed. Feldman and Pentland (2003, p. 96) define those as 'repetitive, recognisable pattern[s] of interdependent actions, involving multiple actors'. The development towards more formalisation, more mutual coherence between different artefacts and rules, and more routines further contributed to the implementation of the innovative storytelling practices and ultimately made them more sustainable (see also März et al., 2017; Feldman and Pentland, 2003). In other words, because particular practices started to operate as organisational routines their legitimacy increased, they contributed to the predictability of daily practice and as such turned into a form of institutionalisation (Giles and Hargreaves, 2006).

Multi-tool

Although the kamishibai was initially only used in storytelling, some teachers creatively developed different new applications throughout the implementation process. The design of the kamishibai also offered possibilities for puppet theatre, 'television role play', etc. For those users, the artefact was redefined and in a way 'up-graded' to a multi-tool:

Because its possibilities are in a way endless. It's not just for telling stories. I also use it for puppet theatre plays, the children can play with it, religious prints become a kind of . . . attraction, frame, TV, something . . . Gosh, what else am I doing with that? (Tilly)

This additional layer of meaning of the kamishibai as a multi-tool received further legitimacy from the special needs teacher Tess. She organised a brainstorm meeting with colleagues and presented the outcome of that exercise in a document providing an overview of possible educational uses to inspire other teachers.

However, this creative use of the kamishibai as a multi-tool was not shared by all teachers. Some of them insisted on sticking to its original purpose and only wanted to use the kamishibai as a storytelling method. Interestingly, they argued their restrictive use with similar educational arguments as the proponents of the multi-tool. One argument was that given the young age and limited motoric skills of the preschoolers, it was too much of a risk for damaging the kamishibai or the prints, when they'd be given freedom in using the artefact (for example, allowing them to tell themselves stories with the kamishibai prints). They also feared that a wider use would diminish the magic appeal of the kamishibai and eventually jeopardise its very educational potential: 'Some say: "I let the children tell themselves". But I'm not going to do that because I think the magic will disappear and then it might become too normal' (Tara). In these examples we see how the subjective educational theory of the teachers also determined how the interpretative negotiation process between users and the artefact evolved.

Pedagogical instrument in school's language stimulation policy

The cultural and linguistic diversity of the student population of the school increased significantly over only a few years. In response to this development, the leadership of the school launched a more explicit policy on language stimulation, requiring all team members to demonstrate their efforts to contribute to this policy agenda. This policy thus resulted in a new agenda for the school team as it was forced to design and implement pedagogical efforts to better meet the children's needs in language education (in particular stimulating the language development of non-native speaking pupils). However, the school team noticed that their practices around the kamishibai actually already were in line with this policy and could be brought in as their contribution:

When you see you are getting more and more children with language problems, or more and more children with weak language skills—if you may say so—you also felt: those [the pedagogical practices around the kamishibai] are actually nice things to stimulate language. (Tess)

The strategic use of the kamishibai as a language stimulation action turned out also to have substantive advantages. While the kamishibai was initially seen as a way to be loyal within the school cluster and to respond to the external pressure on language stimulation (strategic use), the kamishibai was later seen as an effective tool for the language development of their non-native speaking pupils (substantive use). Strategic and substantive use of the kamishibai, therefore, proved to be mutually congruent and reinforcing each other.

Conclusion

The reconstruction of the implementation practices showed how those practices changed over time as the meaning of the artefact and its perceived educational potential developed. The actual implementation practices resulted from the interpretative negotiations between:

- The actor and his/her normative ideas and agendas
- Other actors and their interpretations and agendas (e.g. school team members and other actors in the school cluster)
- The artefact, with its material characteristics (form and content).

Finding congruency between the meaning induced to the artefact on the one hand and one's own normative ideas and agendas on the other was found to drive this development. Secondly, it became clear that the particularities of the context (e.g. school population, local school policy) were essential to understand the interpretative negotiation processes, as it is the context which determines the

agendas the actors experience. Changes in the context could therefore result in new agendas of which the actors had to make sense (interpretation) and with which they had to deal (negotiate). Redefinitions of the artefact's meaning were an answer to the changing needs or agendas. The degree to which the redefinitions of the artefact met the actual needs added to its legitimacy and eventually facilitated its sustainable implementation. In other words: the contextualised interpretative negotiations between the actors and the artefact (and its developing layers of meaning) determined its actual use in practice.

Negotiation space as an important determinant

The reconstruction of the implementation practices further demonstrated that the development in the meaning of the artefact as well as in its use was dependent on the negotiation space it offered. Negotiation space refers to the leeway and margins for interpretative manoeuvring and bargaining the artefact allowed for its potential users during the implementation process. Our analysis identified three factors that are constitutive for this negotiation space: (1) the level of coercion from the artefact, (2) the authority of interpretations of the artefact by third parties and (3) the micropolitical literacy of the actors.

The coercion from the artefact

The negotiating space is, first of all, dependent on the extent to which the artefact itself—through its material form—privileges or enforces particular forms of use. In other words: to what extent are variations in the use of the artefact restricted a priori by characteristics of the artefact itself? The level of coercion from the artefact also influences the interpretative negotiation process between the artefact and the user: the greater the coercion from an artefact, the less negotiating space is experienced by school team members.

The negotiation space of the kamishibai was fairly large: although the artefact was part of a long-standing Japanese tradition and had a clear educational purpose, it left space for users to fill in the meaning of the artefact and how to use it. For example, one could let the prints speak for themselves as much as possible and not attract attention to oneself as the storyteller. This use was described in the manual that Tara received with her kamishibai. Another possible use is that the storyteller supports the message on the prints with gestures and facial expressions. Tara shifted her use of the kamishibai to the latter in response to the increasing diversity in the mother tongue of her pupils, as she had noticed that it helped those kids to better understand the story and as such pick up more vocabulary. This understanding also reflects the development of her professional expertise (i.c. her subjective educational theory):

They say that that is not really the purpose of the kamishibai, that the prints must speak for themselves . . . But then I think: now I get the chance to do that [use additional facial expressions and gestures] and this is so helpful for the children from non-native speaking families in my class.

The materiality of the kamishibai did not force a specific use. It was the interpretative negotiation process between the user and the artefact that determined which of the possible scripts eventually turned out to be functional and therefore legitimate. The more open, flexible nature of the kamishibai is also apparent from the fact that some team members interpreted it as a multi-tool and that different meanings, with accompanying scripts for use, could be identified with the artefact. However, this does not mean that there was no coercion whatsoever from the materiality of the kamishibai. For example, using the kamishibai required prints of a specific size if one wants them to fit in functional way or be visible in detail from the distance the audience is positioned.

The authority of interpretations by third parties

The negotiating space was also influenced by the context in which the implementation process took place and in which other actors attributed (alternative) layers of meaning to the kamishibai. Those definitions of the artefact by third parties become part of the interpretative negotiations. In other words, the authority or legitimating power of these alternative meanings varied and as a consequence their level of coercion. The more these interpretations were seen as compelling, the smaller the perceived negotiating space.

For example, when Tara introduced the kamishibai as a storytelling tool at the start of the implementation process, this was an open, un compelling invitation to her colleagues to adopt this definition. Her colleagues received the message, but most of them didn't feel compelled to start using it or only did so in a very limited or incidental way. However, later on, when storytelling with the kamishibai became the privileged practice in response to the school's changing language education policy (also including requirements on minimal frequency of use), the negotiating space by the teachers was much smaller. Refusing to use the kamishibai, for example, no longer was a legitimate option and particular forms of use were more explicitly imposed by the school policy.

These examples illustrate that the interpretative negotiation process is a situated, multi-actorial and polyphonic process.

Micropolitical literacy

A third determinant of the negotiation space is the micropolitical literacy of the users. In particular, the operational aspect of micropolitical literacy, as described by Kelchtermans and Ballet (2002), appears to be related to the negotiation space. The operational aspect of micropolitical literacy refers to the extent to which actors are able to read the artefact in terms of opportunities for achieving desirable working conditions as well as the leeway in its possible use. Micropolitically literate actors then see how they can achieve congruency between the use of this artefact and their individual or collective beliefs, preferences and (individual or shared) agendas by defining the artefact in a specific way. Actors with little micropolitical literacy will experience little negotiation space, even with open artefacts, as they don't 'see' the opportunities for their own decision-making. The three respondents in this study demonstrated enhanced levels of micropolitical literacy. For example, Tara's micropolitical literacy clearly showed as she understood the potential of the kamishibai for meeting the new requirements of the school's policy on language stimulation. The kamishibai became, as it was, a micropolitical tool to achieve their interests (i.e. positioning themselves as loyal players in the school team) while safeguarding important working conditions (e.g. avoiding an increase in work pressure or having to implement new practices that were less congruent with their normative educational beliefs). This illustrates that the interpretative negotiation process is also a creative, strategic and political process.

Discussion and conclusion

This study contributes to theory development on the implementation practices in educational innovation, and more in particular on the role of artefacts in them. It deepens our understanding of the contextual dynamics of interpretation, translation and modification when innovative ideas or practices get enacted (Ball et al., 2012; Fullan, 2016; Van den Berg, 2002). Building on our previous research about artefacts (März et al., 2017; Vermeir et al., 2017), we further demonstrated the micropolitical nature of this sense-making in terms of interpretative negotiation around different agendas and interests (Kelchtermans, 2007).

In our analysis, we also explored the meaning and role of the artefact's materiality in the implementation practices, for example, in terms of its negotiation space (which in turn determines the possible variation in implementation practices). The process of interpretative negotiation—we argued—is not only determined by the individual and collective beliefs and agendas of the school team members but also by the material characteristics of the artefact and the organisational (policy) context. The latter partly determines which agendas the actors find themselves confronted with. Relevant other context elements are the other actors (e.g. pupils, colleagues, external parties) with whom the school team members interact and who may introduce (alternative) interpretations of the artefact into the interpretative negotiation process. Both evolutions in users' agendas and confrontations with new or alternative interpretations by third parties influence the negotiation process.

An important determinant of interpretative negotiation processes turned out to be the negotiation space. This determines to what extent users can influence which interpretations are given to the artefact and how the artefact is used. At least three factors were found to influence that negotiation space: the coercion from the artefact, the authority of interpretations by third parties and the micropolitical literacy of the users.

In summary, interpretative negotiation processes appear to be continuous, situated, normative, multi-layered, multi-voiced and multi-actorial, creative and political processes, aimed at achieving congruency with actors' own beliefs and agendas. Understanding implementation practices thus requires adequate conceptual glasses to grasp their contextualised and complex nature. The fidelity approach, which is still often used in innovation research, therefore falls short as a conceptualisation of implementation processes. This approach focuses primarily (and often exclusively) on the question to what extent (i) the actual implementation of the innovation is a faithful representation of the proposed innovation goals and/or (ii) the innovation practices are effective and achieve the intended outcomes. Its implicit or explicit denial of the meaningful interactions that are inherent to implementation practices (sense-meaning, interpretative negotiation, etc.) results in a reductionist conceptualisation that remains blind to the processes which form the dynamic core of educational innovation. It thus does not do justice to the complexity and contextual nature of innovation implementations but also reduces school team members to merely executors of policy decisions. This way it undermines the idea of professionalism of school teams.

Our study also shows how a small-scale study still allows for a more in-depth understanding of implementation practices. Obviously, this limitation of scale and data size implies that conclusions have to be drawn with caution and that the findings (in the form of grounded concepts) need to be critically tested as hypotheses in further research. Finally, we think that in particular the role and meaning of the materiality of artefacts deserve further research attention. The various so-called socio-material approaches to educational practices provide a promising venue for that endeavour (Fenwick et al., 2011).

Notes

1. In Flemish education, the Kindergarten is part of the school system and welcomes children from the age of 2 ½ until 5. Attendance is free of charge. Although there are some autonomous Kindergartens, most of them are integrated in the site of a Primary School.
2. A school cluster refers to an organisational structure, encompassing a number of schools from the same geographical area. The schools remain separate organisations (with their own principal and/or school board), but commit themselves to structural collaboration on a number of issues (e.g. human resources development; professionalisation). School clusters get financial incentives from the Ministry of education. As such the cluster constitutes an additional level of local policy making, in this case on

the improvement of language education for pupils from non-native speaking families. We will refer to this diverse population of pupils as ‘non-native speaking pupils’.

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