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## **Learning stories: An empirical analysis of their use in Germany**

Learning stories are used in early childhood education in Germany and throughout the world as a form of assessment and pedagogical documentation. The concept aims to record children's development in a way that is child-centred, non-standardised, holistic and socioculturally embedded. In order to obtain a picture of how this ambitious aim is pursued in practice, 338 learning stories from 32 early childhood education (ECE) centres in Germany were analysed. The analysis shows that the aims of the learning story concept are only partially achieved. In particular, the writers of the learning stories often do not make the stories' subjective character clear, and tend to only focus on a limited number of the learning dispositions that underlie the concept. Many learning stories evaluate children's abilities by way of comparison with a theoretical normal development. The form of the stories (language, text, use of pictures) often makes them less accessible to children.

Keywords: assessment; learning stories; learning dispositions; pedagogical documentation

Learning stories are used in early childhood education centres throughout the world as a form of assessment and pedagogical documentation. The Organisation for Economic Co-operation and Development (OECD) reported, that eleven out of 20 countries use 'storytelling' in ECE (defined as 'examples of work and feedback that tell the story of the child's development during a certain period of time') (OECD 2015, p. 176). The use of learning stories is also widespread in Germany. There are no prescriptions for ECE centres which kind of assessment or forms of pedagogical documentation is to use and hence they are free in their decisions. Regional surveys show that around one in eight German early childhood education centres uses learning stories (Fröhlich-Gildhoff and Strohmer 2011; Jasmund et al. 2012). Against the backdrop of the important status enjoyed by the concept of learning stories both internationally and in Germany, the present study explores the question of how the concept is currently being put into practice in Germany and what implications this has regarding teachers' conceptions of pedagogical documentation and early childhood education.

## **Assessment in early childhood education: learning stories**

The concept of learning stories was developed by Margaret Carr in New Zealand in the 1990s. Learning stories are the main form of assessment used in Te Whāriki, the New Zealand early childhood curriculum (Carr 2004). The stories are based on learning dispositions, and aim to help ensure that each child's individual educational processes are recognised and supported (Carr 2001). In Te Whāriki, the following five learning dispositions were defined for the New Zealand curriculum and as a basic framework for learning stories: 'taking an interest', 'being involved', 'persisting with difficulty or uncertainty', 'communicating with others' and 'taking responsibility' (Carr 2001, 24).

Carr (2001) notes that learning stories are always linked to social interaction, and consequently are strongly embedded in the social and cultural context. Carr describes the writing of a learning story as a dialogic process, in which the documenting teacher discusses their observations about a situation and their interpretations of it with both their colleagues and the child themselves; accordingly, she considers the intended audiences of a learning story to be the child, their family, the teacher themselves and the other members of the teaching team at the ECE centre (Carr 2001). Based on this perspective, assessment in the form of learning stories encompasses the three elements 'noticing, recognizing, responding' (Ministry of Education 2004, 6).

In learning stories, examples of situations in which the children act or interact are selected, described and interpreted. Learning stories are conceived of as a form of narrative assessment, and are expressly not an objective measurement. This distinguishes them from standardised, objective assessments (e.g. skills checklists or development tables). The narrative character of the stories is intended to enable learning processes to be presented holistically and located within a larger (sociocultural) context, rather than simply presenting learning dispositions in isolation (Carr 2001). Learning stories thus present a subjective interpretation that can serve as a basis for discussion and agreements between everyone involved (Carr 2001). In her book 'Assessment in Early Childhood Settings' (2001) Carr describes the process of the development of a learning story in as persisting of the four steps 'describing', 'discussing', 'documenting' and 'deciding'. In particular, the chapter on the step 'discussing' carves out that there is no objective truth about a certain situation. Instead every situation can be interpreted in different ways. Thus, discussions on possible interpretations are to be discussed among the teachers (Carr 2001, p. 125). Because of the holistic character of the learning stories, it should also be possible to take the context of the learning into account. In this

way also hindering conditions should be identified - especially for children with special needs (Flämig et al. 2009).

The concept of learning stories, with its focus on learning dispositions, is clearly distinct from other forms of assessment. Instead of a deficit-focused perspective on the child ('What can't they do yet?'), the stories are supposed to provide a resource-focused perspective ('What have they learned?') (Carr 2001). This places learning stories in the same tradition of early childhood pedagogy as forms of pedagogical documentation that aim to make educational processes 'visible' (Gewerkschaft Erziehung und Wissenschaft 2009; Project Zero and Reggio Children 2011).

The methodology and objectives of learning stories closely correspond to the social constructivist perspective on children and early childhood learning processes that is now dominant in early childhood pedagogy (Branscombe et al. 2013). From this perspective, the child is seen as a subject that actively and autonomously educates themselves and possesses a natural curiosity and an intuitive capacity to learn (Bischoff et al. 2013).

Accordingly, learning stories as a form of assessment do not apply a predefined schema to children's actions, but take the children's behaviour as their starting point and highlight their role as active learners (Grindheim et al. 2010). The focus on learning dispositions reduces the emphasis on domain-specific achievements since learning dispositions can be observed in all of a child's activities (e.g. building or making things, roleplaying, ball games) and are independent of any particular content. This approach attempts to take individual account of children's varied interests and personalities (Leu et al. 2007) and serves as a basis for the inclusive education of children with a variety of abilities (Dunn 2000).

The narrative character of learning stories and the way that they address children are also intended to increase the children's involvement in the documentation and to promote their capacity for self-reflection (Carr 2011). These features allow learning stories to play a significant part in constituting children as self-educating, learning subjects (Koch and Nebe 2013; Liljestränd and Hammarberg 2017; Schulz 2013).

In summary, the following arguments are used for the work with learning stories in early childhood education:

- Individuality: Learning stories, in particular, consider individual interests and characteristics (Carr 2001, p.19).
- Dialogue: Learning stories can be a stimulus for exchange between teachers, children and families (Carr and Lee 2012, pp. 41-42).

- Self-reflectivity: Children are encouraged to reflect on their learning (Carr 2011, p. 267).
- Observation: Teachers are encouraged to observe children carefully, precisely and in a differentiated fashion (Carr 2001, p. 109).
- Resources: The children's strengths are carved out and emphasized (Carr and Lee 2011, p. 66).
- Learning dispositions: Observations become independent from content; positive development can be seen in every situation (Carr 2001, pp. 24-25).
- Holism: A situation and a child's behavior is seen in a broader context and not in a 'fragmented and context-free' manner (Carr 2001, p. 4).
- Narration: Adequate mode of meaning-making, increasing comprehensibility and long-term anchoring of insights (Carr 2001, p. 93).

Despite the above attributes of learning stories, there are also some criticisms of the concept of learning stories, which can be boiled down to three main strands. The first strand of criticism questions the nature of learning stories. On the view of Sadler (2010), only limited conclusions about learning dispositions can be made on the basis of the observations made for learning stories, and the open-ended, random way in which learning stories are written means they cannot ensure that the full complexity of a child's learning is captured. Blaiklock (2013) also notes the concern that the development of key areas of knowledge and skills may be overlooked due to the unsystematic nature of the approach. It is also claimed that many learning stories are superficial and do not adequately explore all the potential interpretations of a given situation (Zhang 2016).

A second strand of argument raises the problem of how the approach can properly be put into practice. Various critics have commented on the time-consuming nature of the process of writing learning stories (Deutsches Jugendinstitut DJI 2007; Moritz et al. 2012; Zhang 2016).

A third line of criticism concerns the way the concept is applied to early childhood education in Germany. Critics argue that since (unlike in New Zealand) learning stories are not closely linked to the curriculum in Germany, they have a much lower status and are only one of many tasks that teachers are expected to carry out (Müller and Zipperle 2011). These critics also claim that it presents an additional obstacle for German

teachers to have to eschew externally managed assessment and categorisation schemes in favour of ‘dialogic learning’ (Kupfer 2010, p. 199).

### **Research method: learning stories as documents with power**

This article explores the question of how the concept of learning stories is currently put into practice in early childhood education in Germany. It does so by analysing the documents that are produced as a result of work based on the learning story concept. The article’s approach is based on the view that written documents possess considerable power. Recording a particular observation and an interpretation of it in writing lends the observation and interpretation a factual character. On this view, the documents are not regarded merely as stores or archives of facts about what happened, but as fact-constituting actors in their own right. This approach is based on sociological (e.g. Latour 1996) and philosophical (e.g. Ferraris 2012) discourses that address the function of documents in constituting social processes and institutions. This perspective is especially prominent in recent pedagogical treatments of documentation in and about childhood, for example, studies by Bollig (Bollig 2008), Koch and Nebe (Koch and Nebe 2013) and Schulz (Schulz 2013) that are based on Latour’s actor–network theory. A similar approach is taken by Alasuutari et al. (Alasuutari et al. 2014) and Alasuutari and Kelle (Alasuutari and Kelle 2015), who follow Ferraris (2012) in seeing inscription as constitutive of institutions. These studies focus on the production or presentation of reality through writing.

In accordance with these reflections on the power possessed by documents, this study analyses learning stories with reference to the documents that the teachers produce. It focuses on the documents that are regarded as learning stories by teachers, which are not necessarily equivalent to texts that would be theoretically defined as learning stories. The primary aim is not a comparative evaluation of the intended and actual practice of learning stories. Rather, the approach is an empirical and exploratory one that is intended to chart how learning stories are used in practice in Germany. In a nutshell: how are learning stories used in Germany today and what can they reveal about the current conception of early childhood education?

### **Materials and methods**

Following the grounded theory method (GTM), the sample was generated based on the principles of theoretical sampling: the learning stories that were included/analysed

in the study were selected on the basis of the variety of theories contained in the stories, i.e. over the course of the study there was a continuous search for variants of/contrasts with theories that had already been identified (Breuer 2010). This process of ‘continuous comparison’ (Strübing 2004, p. 18) and the resulting expansion of the data corpus were intended to increase the qualitative richness of the data. This process was continued until no new theories (= variants of learning stories) could be identified, i.e. until theoretical saturation was reached (Corbin and Strauss 2015). This ensured that the theories that were recorded were more relevant to the research question than would have been the case with a statistically representative sample based on sociodemographic or structural data (Kelle and Kluge 2010).

The process of creating the data corpus began with ECE centres that had participated in a pilot study on the implementation of learning stories in Germany that was carried out in 2005 by the DJI. Making contact with these centres, in conjunction with recommendations from existing contacts, yielded the names of other ECE centres that use learning stories. This approach resulted in a total of 338 learning stories from 32 ECE centres being included in the study. 73% of the learning stories came from groups with children aged over three and 27% from ones with children under three.

There was considerable variation in the centres’ level of experience with learning stories: one ECE centre had been working with learning stories for 15 years (since 2001), while two had only recently begun using them (2016); on average, the participating ECE centres had eight years’ experience with learning stories (median: seven years).

The ECE centres were asked to select learning stories that they themselves regarded as typical. This means that when analysing the data, it should be borne in mind that the ECE centres themselves were able to select the learning stories provided for analysis. This means it is possible that they tended to select learning stories that were particularly well regarded, which may have skewed the sample (positive selection).

Like the sampling, the data analysis was based on GTM principles. The grounded theory method is especially well suited to exploratory studies like this one due to its ‘dual standards of systematicity and openness’ (Berg and Milmeister 2011, p. 307). An initial study (Knauf 2017) developed a typology of learning stories in practice, with the aim of surveying the field. This typology enabled a systematic overview of the practice of learning stories, an area that has been the topic of little previous research. However, the process emphasised certain categories while giving little or no attention to others.

For this reason, the analysis presented here supplements the typology with a second analysis process that brings out the variety of the categories contained in the material. The material was recorded by assigning keywords to individual textual elements (Charmaz 2006). Several codes were consolidated into single categories. The aims of GTM are, firstly, to work closely with the material and, secondly, to explicate and incorporate the theoretical preconceptions of the researchers (rather than pretending they do not have any). Accordingly, the initial categories, which were developed on the basis of close work with the material, were supplemented by codes developed on the basis of theoretical preconceptions. This can be illustrated using the example of the category 'Making the subjectivity clear': the first stage of coding had the codes 'Asking the child questions' and 'Own interpretation section', which describe phenomena that were found in individual learning stories, i.e. ones that were discovered in the material. With a view to a key topic in theoretical discussions, namely the subjective character of learning stories, both codes were interpreted as indicators of an explication of the subjective nature of the stories, and were combined into the category 'Making the subjectivity clear'. In addition, the theoretically based code 'Personal perspective' was added, which looks for formulations that identify the writer as an individual rather than making it seem that the learning stories are written from an objective, authorial perspective. The material was then analysed according to this code. As well as the examples that were identified in the course of coding, simple frequency counts were carried out to establish the scope of particular phenomena; however, since the sample was not representative these quantifications can only be generalised to a limited extent, if at all.

## **Results and discussion**

### **The subjective nature of the stories is only made clear to a limited extent**

One distinctive feature of learning stories is their subjective nature. This distinguishes them from other forms of assessment, which aim to record a child's development status as objectively as possible. Subjectivity is not viewed as a disruptive factor, but as a trigger for discussions about a child's learning process. Carr and Lee (2012, 60) emphasise that learning stories enable 'agency and dialogue' between everyone involved, since learning stories allow teachers to express the child's perspective on their behalf: not in order to make a diagnosis, but in order to enter into dialogue with children, parents and colleagues about the child's learning. However, the



condition for this dialogue is that the subjective character of the learning story is made clear to all involved. In the learning stories analysed in this study, various elements were identified that make clear that the interpretation provided by the stories is subjective. It was especially common to find formulations that emphasise that the learning story was written by a particular person. For instance, most learning stories (n=269) are written in letter form and begin by addressing the child (e.g. ‘Dear Linnea,’). In most cases, the learning stories also ended with a personal sign-off (e.g. ‘Yours sincerely, Andrea’); however, just over a quarter (n=92) end without one. A personal sign-off at the end was one way to make clear the subjective nature of the text.

Another common strategy for emphasising the subjective character of the story was the use of the first-person singular (e.g. ‘Over the past few weeks, I’ve noticed at lunch how well you’re able to eat all by yourself’). As well as simple descriptions from a first-person perspective, some stories also expressed suppositions that are clearly hypothetical rather than factual in nature: ‘It looked to me as though you’d come up with a proper plan.’ In some cases, the teachers very clearly expressed their own feelings, for example: ‘You worked with so much joy and enthusiasm that it was really fun for me too to watch you do it.’ Of all the analysed learning stories 156 were explicitly written in the first-person form.

Direct questions to the child were significantly less common (n=52). Questions emphasise subjectivity, because they request confirmation (e.g. ‘Didn’t that hurt at all?’) or make very clear the hypothetical character of the teacher’s personal interpretation (e.g. ‘Were you trying out a kind of race by yourself?’).

One especially clear way to emphasise the subjective character of the story was to include a special section with a heading that identifies it as an interpretation. Learning stories of this kind began by describing a situation, followed by a section with a heading such as ‘What forms of learning might I have seen here?’ or ‘What do I think Elias learned?’. This section generally switched from directly addressing the child to talking about them in the third person, sometimes in the form of an inner monologue:

... in this way, she tried out the alternative I had presented – so there was also a little bit of social learning. And I think her attempt could represent a new form of expression in her repertoire, and that she was aware of this. And F. is standing her ground once again; she simply doesn’t allow herself to be brought down or daunted by difficulties. On the contrary, I have the feeling that overcoming problems is the thing that F. really enjoys!

These learning stories all came from two ECE centres; evidently, this is a general principle at these centres which teachers have agreed on. By contrast, the use of the first person, sign-offs and questions to the child were more random and unsystematic, and thus appears to be intuitive rather than based on explicit principles.

Over half the learning stories (n=186) were written in the form of a factual report. For example, one learning story reads:

You participate willingly in all the activities on offer. Crafts, painting, singing, PE – you enjoy it all. You have lots of ideas and like to try out new things. We’re currently reading a long story at story time, *Little Peter’s Journey to the Moon* ... you’re able to listen attentively and still remember lots about the story the next day.

In these learning stories, the person who wrote the text had no identifiable presence, and the content was presented as objective information about the child. The aim of assuming agency or initiating dialogue cannot be discerned in the learning story itself.

Overall, it was evident that only some of the analysed learning stories made clear their subjective character, as figure 1 shows.

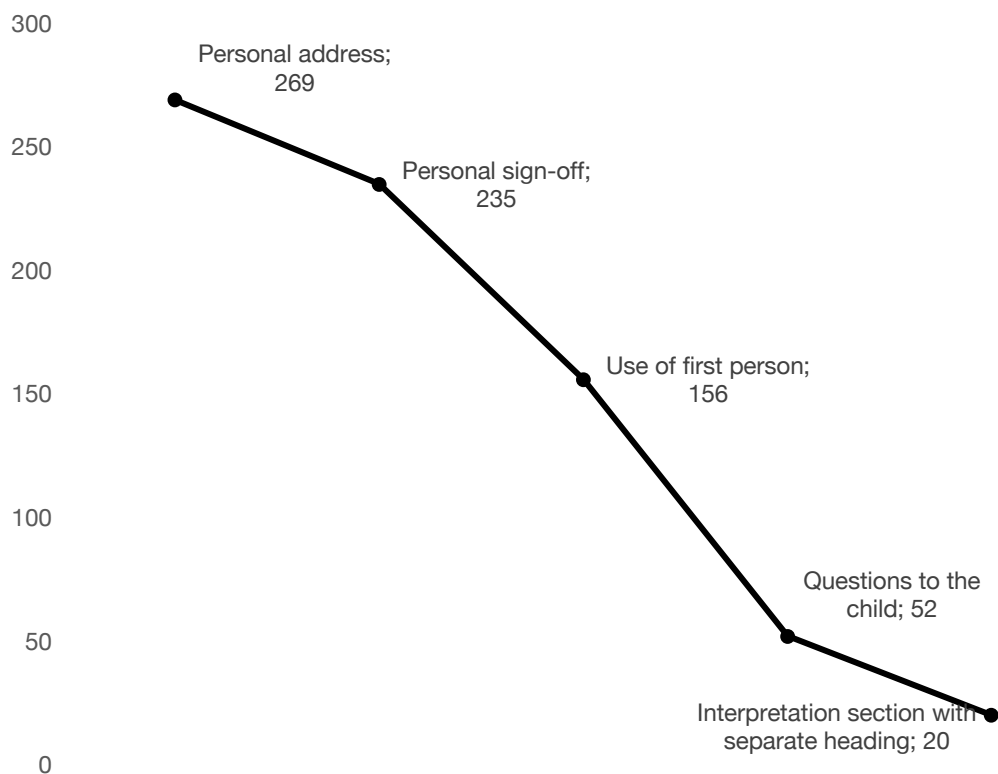


Fig. 1

Indicators of subjectivity, frequency, n=338

One of the reasons for this result might be found in a lack of awareness of the subjectivity of the interpretations made by the teachers in the learning stories. In addition, it draws attention to the question, if there are discussions among the teachers about their observations and interpretations.

### **Evaluation and praise are very common**

The aim of learning stories is to enrich children's learning processes, bolster their self-reflectivity and stimulate a dialogue about their learning. The stories primarily attempt to achieve this aim by identifying the child's strengths thus "shifting from deficit to credit," as Margaret Carr (2001, p. 97) succinctly puts it.

In accordance with this objective, almost all the analysed learning stories (n=297) took the form of positive evaluation, describing small details and lots of positive attributes. One example:

Dear M.,

You were playing intently with the chestnuts. When Z. came over, you helped each other to fill your plates, bowls and hands with chestnuts. You swapped with Z. and played together – brilliant! You also enjoyed lying in the chestnuts, even though it was an unfamiliar sensation. It's great that you had so much fun!

In 212 of the learning stories, a particular strength was explicitly mentioned (e.g. 'You explain and show it to the other children so that their work turns out well too.'). However, the descriptions of strengths often had an evaluative character, e.g. 'I'm delighted at how brilliantly (...) and attentively you listen each time.' Although this evaluation is positive, it creates a hierarchy between the writer of the learning story who praises and the child who is praised, which does not tally with learning stories' aim of carrying out a joint exploration of a child's learning together.

Conversely, some other learning stories (n=48) did not talk about the individual child at all, but instead described a shared experience or group activity. Although most of these stories struck a note of positive evaluation, they did not describe the child's strengths or particular behaviours in detail. As has been shown by Jenkins, Floress and Reinke (2015), such general and non-specific praise is a widespread practice among teachers.

The tendency to evaluate behaviour indicates that there is considerable variation in teachers' conceptions of the function of learning stories and of their own role. Three main variants can be identified in the analysed learning stories:

1. Learning stories as a basis for dialogue; the teacher as a dialogue partner who shares their individual perceptions and interpretations with the child.
2. Learning stories as detailed feedback that identifies and reinforces the child's strengths; the teacher as an evaluator who analyses and classifies the child's skills.
3. Learning stories as diary entries recording important experiences so they are not forgotten; the teacher as an archivist or chronicler who documents these experiences.

Especially in Germany, where (unlike in many other countries) the role of staff at early childhood education centres is not unambiguously defined as one of teaching, there is particular lack of clarity regarding what is expected of them (Stöbe-Blossey and Torlümke 2010). Thus, a dilemma emerges: Early childhood teachers on the one hand want to support free play and individuality. On the other hand, they feel they should foster their learning by evaluating their activities. A possible way out of this dilemma might be to involve children more explicitly in assessment and documentation: As several studies show (e.g. Einarsdottir et al. 2009) and concepts like the mosaic approach have proven (Clark 2014), even young children can successfully share their perspectives on learning and on their own competencies.

### **Learning dispositions: more interest, less responsibility**

A reference to a learning disposition was found in almost all the learning stories. Only nine learning stories presented a purely descriptive account of an apparently randomly selected situation with no discernible reference to a learning disposition, while most of the stories (n=284) identified two or more learning dispositions in the described situation, as figure 2 shows.

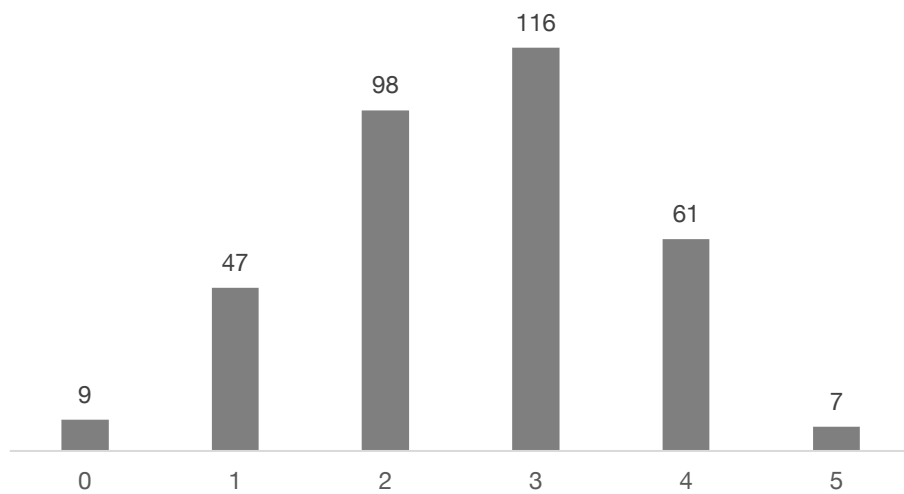


Fig. 2

Number of learning dispositions described in a particular learning story, n=338

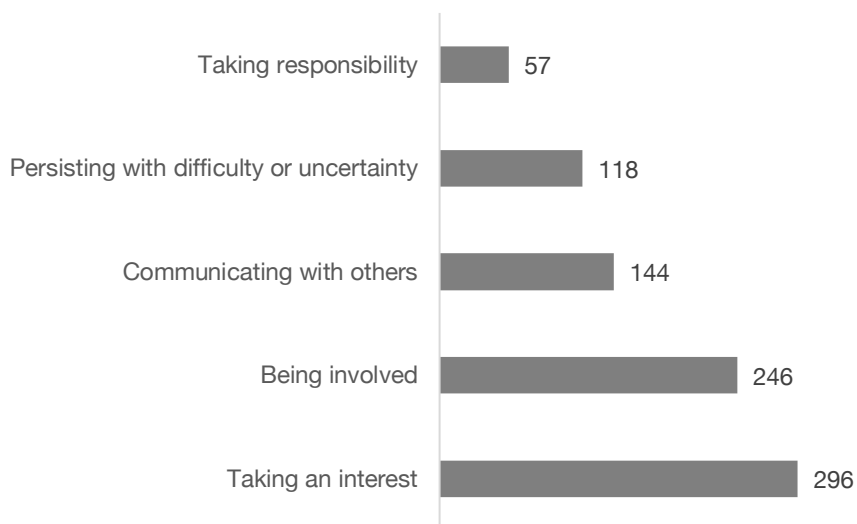


Fig. 3

Frequency of references to learning dispositions, n=338

Figure 3 shows the distribution of references to various learning dispositions. Almost all the analysed learning stories described the learning disposition ‘Taking an interest’, and many described ‘Being involved’. ‘Communicating with others’ was observed in just under half of the analysed stories and ‘Persisting with difficulty or uncertainty’ in just over a third. The disposition of ‘Taking responsibility’ was only described in a few cases.

This finding suggests that children can frequently be observed taking an interest or being involved, while it is less common to observe them taking responsibility. However, it also suggests that the teachers' patterns of perception and expectations of children may be more focused on behaviours such as interest or curiosity rather than on taking responsibility or being persistent. The result also has implications regarding the strategies that are used to select the situations described in learning stories. Rather than trying to find a situation for each learning disposition that illustrates this disposition, it appears that teachers instead select situations that they intuitively regard as significant. Moreover, when analysing situations teachers appear to primarily notice instances of the children taking an interest or being involved, but tend to overlook situations where they take responsibility. The precise connection between a focus or lack of focus on particular learning dispositions by the teachers on the one hand and the behaviours actually exhibited by the children on the other would need to be the subject of future research (in the form of systematic observation, for example) and cannot be explained here. However, it is conceivable that effects such as selective perception and expectations on the part of the teachers could influence both their perception and their behaviour (Kim 2015).

### **The language used in the stories can make them less accessible to children**

One key aim of learning stories is to address both children and parents. Carr and Lee (2012) describe learning stories as invitations to dialogue that are intended to enable and encourage 'sustained shared thinking about learning and about whatever comes to mind' (p. 42). The language used in learning stories is key to achieving this aim. The analysis makes clear that in around a third (n=102) of learning stories, the use of difficult-to-understand language made the stories less accessible. Long sentences with parenthetical expressions and subordinate clauses were especially common (n=56). There was also frequent use of foreign words (n=43) and nominalisations (n=33). Many learning stories used specialist pedagogical terminology such as 'hand-eye coordination' or 'solution-focused activity'.

As well as language narrowly construed, there are also other factors that can make learning stories less (or more) accessible. Simply the length of the stories can present an obstacle. Half of all the analysed learning stories were over 12 sentences long.

Among the learning stories analysed, there were 47 handwritten stories; of the typed learning stories, only 12 used capital letters. Of course, it cannot be assumed that

children at ECE centres can read, but they can recognise letters or individual words. Handwritten texts are much less accessible.

One key factor that makes learning stories more accessible is the use of photos, which allow children to recognise the situation that is being described without reading the text. The vast majority of the analysed learning stories (n=271) were illustrated with photos; only around a sixth (n=67) did not have any pictures.

This means that alongside many learning stories that were easily comprehensible in both visual and linguistic terms, there was also a considerable number of stories that were less accessible. This suggests that there is not always a focus on children as the intended audience of learning stories or that there is limited awareness of the need to use language that is suitable for children. It is also possible that the teachers are less focused on learning stories' goal of initiating dialogue with children (*inter alia*). This finding is consonant with other studies that show a lack of participation by children in the documentation process (Knauf 2015).

### **Conclusion**

The analysis of 338 learning stories from German early childhood education centres shows that there is considerable variation in how learning stories are put into practice. Many learning stories deviate from the learning story concept, sometimes significantly. However, many others conform closely to the formal requirements and goals of the concept as mentioned above (p.3). Based on an aggregation of the material, it is possible to identify three main recommendations to properly put learning stories into practice:

- Make the subjective character of learning stories explicitly clear by using personal address/sign-offs, by asking questions to the child and by clearly separating the description and interpretation of a situation.
- Draw on the full breadth of learning dispositions by specifically including not just situations in which children display the learning dispositions 'Taking an interest' and 'Being involved', but also ones in which they display behaviours interpretable as 'Persisting with difficulty or uncertainty', 'Communicating with others' or 'Taking responsibility'.
- See learning stories as a way of stimulating dialogue with children and parents and focusing more on the teacher's role as one of exploration and co-construction *with* the child rather than the evaluation *of* the child.

- Make learning stories more accessible by focusing more on the use of short sentences, verbal style, clarity and simple vocabulary. The length of the learning stories should also be limited. Photos and typed text also help improve accessibility.

The analysis presented in this article has focused on the production of learning stories in the form of written documents. Another area that would be of interest is the conditions in which learning stories are written, such as the training that teachers receive on working with learning stories, the time they have available and how strongly the concept of learning stories is embedded in a particular ECE centre's approach. Further research should follow up with the children's perception of learning stories and their needs concerning the design of learning stories.

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