HisDeKo: A study about the historical thinking of primary school children

Andrea Becher* – University of Paderborn, Germany
Eva Gläser – University of Osnabrück, Germany

Abstract

Historical learning should be taught in a competence-oriented way in primary school. However, there has so far been little research on children’s competences in the elementary and primary areas of historical learning. The HisDeKo (Historical Thinking and Competence Development) research project, which is located at the universities of Osnabrück and Paderborn, has therefore been pursuing the empirical investigation of children’s competences in historical thinking. This involved moving from considering children’s traditional ways of thinking about history as historical narratives and accounts set within a chronological framework to evaluating their ability to consider the significance of sources and interpretations in reconstructing the past. In a qualitative study, 114 children have so far been individually interviewed. The evaluation procedure was developed on the basis of qualitative content analysis. Key results of this study are that the pupils know about the tradition of the past and can name different types of sources and understand that it is through sources that we find out about the past. Therefore, it appears to be appropriate to teach the methods of historical enquiry from the first grade onwards.

Keywords: Germany; historical knowledge and understanding; history didactics; primary school; qualitative research

Historical learning in primary schools

Historical learning in primary schools is integrated into the subject of Sachunterricht (general studies) throughout Germany. In contrast to other subjects, Sachunterricht has a multitude of subject-specific references. In order to ensure continuity both with secondary school subjects and with the experiences and interests of children in the world as a whole, content and processes in the didactics of Sachunterricht are selected from five different perspectives. These different domains are taught through an integrated cross-curricular approach – the general multiperspectival concept of teaching and learning that is also related to children’s everyday experiences (see Figure 1).

The five different perspectives (domains) are to be combined by drawing upon the full range of student faculties to enable them to grasp the subject matter of their lessons. In order to design effective teaching and learning strategies, teachers’ knowledge is essential – both of the conceptual basis of the curriculum and of students’ pre-conceptual understanding. The theoretical basis for this is conceptual change theory, which has been discussed since the 1970s and describes learning as an individual change of ideas (Gläser, 2013: 116). In the meantime, domain-specific empirical
teaching and learning research has become established in all subject didactics and is an important focal point within the didactics of Sachunterricht (Hartinger, 2015: 48–9). This applies to the teaching and learning of history, as it is assumed that children and young people have ‘more or less useful naïve theories of knowledge areas’ (Krieger, 2001: 46–7; see Günther-Arndt, 1981). Research into the learning prerequisites of primary school children learning in history is the central focus of our current project, HisDeKo (Historical Thinking and Competence Development) – against the backdrop of the current limited level of research.

Figure 1: Perspectives of Sachunterricht
Source: based on GDSU (2013)

Empirical research in Germany on historical awareness

A normative model for historical awareness was developed by Hans-Jürgen Pandel (1987), and since the 1990s this has been very influential in the teaching of history in Germany, providing a theoretical basis for empirical research into its teaching and learning (see Figure 2). Historical consciousness as a ‘formal mental structure’ (Pandel, 2017: 133) has seven dimensions: the three basic dimensions of the awareness of time, reality and history, plus four social dimensions of identity, political, social-economic and moral awareness.

The structure of the seven dimensions of historical awareness was transformed into qualitative research designs to provide empirical evidence of the dimensions (von Reeken, 2017: 18). For this reason, Renate El Darwich (1991), in the late 1980s and early 1990s, asked a total of 18 children and young people aged 5 to 14 about the dimensions of historical awareness. She used impulse-driven qualitative individual interviews, and found from her data that the dimensions – especially the basic dimensions of historicity – would only differentiate with increasing age.
At the end of the 1990s, Helmut Beilner (2004) and Martina Langer-Plän (2004) surveyed around eighty children at the end of their primary schooling (Grade 4) about their understanding of history. Their findings showed that primary school pupils are already aware of reality, history and temporal awareness, and have an understanding of their own involvement in history. Monika Pape (2008) confirmed the results of the El Darwich, Beilner and Langer-Plän research with her qualitative study from 1999 and 2000, which again shows that children have an interest in history and encounter it in everyday life (Becher and Gläser, 2013: 165).

Recent quantitative studies confirm these results: Carlos Kölbl and his colleagues (2012) found, by interviewing a total of 929 pupils in Grades 2, 3 and 4, that children’s knowledge of history and interest in history continues to increase with age. Their knowledge of history, as well as their ability to orient themselves historically, grew; they were increasingly able to differentiate between reality and fiction, and to understand chronology. Gender-specific differences in the interest of German primary school children in history, which Pape (2008) had noted, were confirmed by the Kölbl (2012) study.

The state of research on children’s awareness of history is not yet sufficiently well-founded to provide empirically substantiated basic statements on the ‘age-appropriateness of teaching design’ (Gautschi, 2007: 44) based on the processes of teaching and learning in history. The main problem is that little research relates theory to practice.

**Competence orientation from a didactic point of view**

The primacy of competency orientation, in force since the Programme for International Student Assessment (PISA) 2000 study, means that different subject-specific competency models have been, and are being, developed in all subject didactics in Germany. Accordingly, in line with the development of national educational standards in Germany (Klieme et al., 2007), the competency models ‘should make statements
about the dimensions and levels of competences’ that ‘can be empirically verified in principle’ (ibid.: 22). Various competency models have also been designed and discussed for history didactics, with the aim of operationalizing historical teaching and learning processes (see Schreiber et al., 2007; Verband der Geschichtslehrer Deutschlands, 2006; Gautschi, 2009). What all these models have in common is that they were developed exclusively on the basis of theory and not research. They are thus to be understood as concepts that depict an ‘ideal-typical understanding of historical thinking’ (Rothgangel et al., 2010: 241), which has been transformed into domain-specific dimensions of competences.

Empirical research into these competency structure models is currently still largely a desideratum. Research-based statements on the contexts, age groups and influences under which development takes place in the individual areas of competence is still pending (Klieme et al., 2007: 23), so that empirically justifiable definitions of reasonable requirements for historical learning for primary school children have not yet been achieved (Becher and Gläser, 2015: 41).

The need for empirical research into primary school children’s thinking skills in history

For historical learning in primary schools, the Perspective Framework Sachunterricht developed by the Society for the Didactics of Sachunterricht (GDSU, 2013) describes areas of competence that outline the ‘ability to think historically’ (ibid.: 56). The competences described in these areas of competence are to be promoted with a view to the overarching goal of developing and expanding a reflective historical awareness. The focus is not on the ‘acquisition of factual knowledge’, but rather on the ‘examination of historical questions, and problems that arise, which is methodically guided and increasingly systematic’ (ibid.). It is important for an understanding of history, and of how history is constructed, that the processes of historical enquiry are central to the teaching approach: formulating historical questions (researching, sifting, judging and interpreting sources and representations) and constructing an interpretation. A targeted promotion of competences in the three areas of historical enquiry, methods of interpreting sources and constructing historical narrative accounts (see Table 1) will decisively support this ‘historical process of the formation of meaning’ (ibid.: 57).

<table>
<thead>
<tr>
<th>Table 1: Areas of competence of historical learning in primary school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical perspective area of competence</td>
</tr>
<tr>
<td>Competence of historical questions</td>
</tr>
<tr>
<td>‘The pupils can:’</td>
</tr>
<tr>
<td>- detect changes ... at two different points in time</td>
</tr>
<tr>
<td>- name historical changes and ask about their causes in a targeted way</td>
</tr>
<tr>
<td>- develop concrete historical questions and formulate them in an appropriate language</td>
</tr>
<tr>
<td>- understand that a historical question arises from our present perspective.’</td>
</tr>
</tbody>
</table>
In particular, ‘the fundamental insight that ... knowledge about the past is only possible through the examination of sources and representations (methodological and media competence’ (ibid.: 58), must be encouraged. Thus, it is emphasized that in primary schools, work on and with sources is essential for historical learning.

It is noteworthy that in the USA, researchers since the 1990s (for example, Barton, 2008; Levstik and Barton, 1997) have aimed to open up history through teaching and learning the processes of historical enquiry, using sources and recognizing that history is constructed. Through qualitative interview and observation studies, US researchers were able to gain initial insights into learning requirements. They demonstrated that children in a fifth-grade class were able to prove that they had knowledge of the past but ‘had no understanding of kinds of evidence upon which such accounts are based’ (Barton, 2008: 210) and ‘had little understanding of what historians do or of the interpretive nature of history’ (ibid.).

For the German-speaking countries, research results on the development of competences in historical thought have only been available since the 2010s – especially historical methodological and media competence. For example, the Swiss research group led by Markus Kübler (2013) used a methodological triangularized, quantitatively oriented setting to map different levels of complexity in historical thinking for 4- to 10-year-old children in German-, Italian- and Romansh-speaking Switzerland. They were able to show ‘that kindergarten and lower school children already bring some knowledge elements and connections to historical epochs’, as well as that ‘the majority of lower school children [Grades 1 and 2] already understand that history is being
reconstructed, and secondly that the critical reflection on history (deconstruction) only begins in later childhood’ (Kübler et al., 2013: n.p.). Unfortunately, the research report provides only limited information and explanations on the characteristics of these competences, for example, how far aspects of a reconstruction process can be identified in the children’s ideas in terms of historical methodological competence. However, knowledge of these characteristics is fundamental for the realization of teaching and learning settings of historical learning, which decisively supports the promotion of the historical method and the realization of historical processes of the formation of meaning. In-depth insights into the shape and shaping of competences of historical thinking of children of primary school age are thus the focal point of our research project, HisDeKo (Historical Thinking and Competence Development).

The HisDeKo research project

The empirical justification of competency models of each subject is necessary (Klieme et al., 2007: 22), as discussed above. Research into the subject-specific learning prerequisites of pupils is central to this. Our qualitative, empirical project, HisDeKo, endorses this, and therefore has the goal of further developing competence-oriented historical learning and teaching in primary schools. The central aim of our research project is to develop empirically verified statements about the characteristics of historical thinking and the historical consciousness of primary school pupils. To this end, the aim is to reconstruct (highlighted, analysed and interpreted) student conceptions, or so-called everyday theories of historical thought, with the aim of formulating empirically sound, reasonable and justifiable requirements for early historical learning.

The data on the competence characteristics of children’s thinking was collected through qualitative interviews that were used in kindergartens and primary schools. A total of 114 individual interviews were conducted with children on different areas of competence in historical thought. Of these, 16 children attended kindergarten at the time of the surveys, 37 children attended Grade 1, 18 children attended Grade 2, 11 children were in Grade 3 and 32 children were in Grade 4. Thematically structured interviews were conducted by trained interviewers who used varied stimuli (illustrations of children’s specialist book covers, photographs, term cards), which encouraged the children to make ‘associative statements on pre-defined topics of discussion’ (Krüger, 2006: 94) in focused interviews (Gläser and Becher, 2011: 88). Within the scope of our content analysis, the data was first processed (transcribed) and then analysed deductively and inductively using computer-assisted and paper-and-pencil coding methods. Following the Kuckartz (2016) content analysis, which provides a summary structure, the children’s everyday theories on the individual areas of competence of historical thought were finally reconstructed.

While applying the evaluation and analysis method, one of our research focuses was on reconstructing the learning requirements of children in their initial lessons (Grades 1 and 2; ages 6 to 8 years). This is justified by the findings of Kübler et al. (2013), who deduced from their data that, within the age range of 6 to 8 years, decisive increases in competence of historical thinking could be expected. In addition, one of our specific areas for analysis was concepts from the field of historical methodological and media competence – especially historical reconstruction competence – because from the point of view of the didactics of teaching, the ‘promotion of the fundamental insight that ... knowledge about the past is only possible through the examination of sources and representations’ (GDSU, 2013: 58) is clearly formulated.
In the interviews, the respondents (n=114) were thus also asked about the types of tradition of the past, the significance of sources and the interpretation of history as (re)construction. In the context of the content analysis of the data, our overarching research questions on the competence area of historical methodological and media competence are as follows:

- What ideas do primary school children have about sources?
- Which function(s) of sources do children of primary school age recognize?
- Do primary school pupils already have knowledge about the constructional character of history?

Some key results of our study are presented and explained below.

**Key results**

**Sources of information**

Children do not only experience history in a school context. Historical culture outside school ‘has already been described as fundamentally important for the development of children’s historical knowledge’ (Bietenhader and Kübler, 2012: 154). This raises the questions of how children of primary school age gain insights into history and historical knowledge and what these consist of. Our study showed that it is also possible to distinguish between how children gained their information. The range of ‘information mediators’ includes relatives (parents, grandparents and siblings, for example), diverse media such as television and radio programmes, and the internet, CDs and books. In addition, the children interviewed cited as a third category specific extra-curricular activities that enabled them to obtain information about history (theatre visits, holidays, visits to theme parks, games with friends and so on). In our opinion, the term ‘information mediator’ aptly describes this range of sources.

The children interviewed name different media or people as direct and indirect communicators of information about the past. The statement of 7-year-old Mia (first grade) reveals how precisely the children could partially comprehend the path of their knowledge: ‘My father also told me that at the Varus Battle, we know that the Romans lost against the Germans. … And I asked Dad how he knew that the leader of the Romans was called Varus, and he said that was written in a book.’ With her statement, Mia underscored how she got her knowledge of the historical theme – the Varus Battle. Children’s great interest in understanding the origin of the information is also clear. While her father is the mediator of information, Mia also considers it important that this knowledge was passed on through a book.

Therefore, we also analysed whether and in what way the origin of the knowledge or information from the children interviewed was included in their explanations. It turned out that not only Mia, but also other children, recognized the importance of the information mediator for acquiring historical knowledge, and could reflect on it. We conclude that children received their historical knowledge from different information mediators in Grades 1 and 2. In addition, they could also refer to this information in the historical contexts they describe.

**Key results: Knowledge about transmitting the past**

Another research focus of the HisDeKo study is the question of pupils’ knowledge of historical sources and their significance: which types of historical sources do children include in their own statements on (historical) contexts? Our analysis shows a clear
result: with a few exceptions, all pupils, including the younger kindergarten children, included historical sources in their explanations. The types of sources they named were factual sources, text sources and the oral transmission of history.

After the question of whether primary school children were aware of historical sources was clarified positively, the next analytical stage was to address the question of how this took place. This includes, above all, the question of whether or not children of primary school age have a scientific, empirical understanding in relation to historical sources. For this reason, we related their statements to the analytical steps of the so-called historical method (GDSU, 2013: 57) or the four-step ‘scientific method, excavation, analysis, interpretation’ valid for archaeology (Henderson and Levstik, 2010: 2).

Barton (2008: 211) also investigated this question in one of his studies. His investigation focused on children's notions of historical evidence and the answer to the question of how people could know something about the past. He came to the conclusion that almost all of the students interviewed in the study (fourth and fifth grades) assumed that knowledge of the past was passed on orally (‘oral transmission’). This idea was also expressed by children in our study, although it is noteworthy that unlike the Barton study, there were only a few children who said this. For example, 8-year-old Amalia (second grade) answered the question of how we know today how people lived in the past: ‘From the people who lived before. They kept on recounting this and those who know that, tell it to the other people.’ The statements regarding factual sources are also contradictory. In Barton’s study (ibid.: 213), in which children were also asked about other ways in which people could find out about the past, only a few children named material sources (‘artefacts’). Our analysis of the interviews, on the other hand, shows the opposite picture: oral transmission is hardly named but almost exclusively factual sources are given, whereas excavations and finds play an important role. Tim (first grade, 7 years old) answered the question, ‘How do we know today how people lived in former times?’:

Because people again found something, found, found. ... For example, a spear and then one thinks, then there were real knights and so on. That must be people found out. Perhaps a piece of clothes was found, such a little piece, and then one finds out how it came to be there.

Here it becomes clear that the discovery of artefacts is recognized as an important part of historical research.

**Key results: Function(s) of sources**

What role do children play in relation to historical sources? Artefactual, material sources are primarily described as direct evidence of historical facts, and thus as historical knowledge. An example of this is 7-year-old Mia (first grade), who classifies swords or spears (material sources) as evidence that a battle took place (the Varus Battle):

Because there, because they found a lot of things from the Romans and the Germans. They found a lot of stuff in there. Like a spear or a sword or something. Or half a shield or something from the armour or something. That's why they knew that. I think it was Kalkriese or something.

For Mia, history is thus documented in things found later, the sources of facts. This pattern of interpretation was found in almost all of the students interviewed.

Basically, sources can be distinguished as either remnants or traditions. Almost all of the children interviewed explained that things would not be left consciously for
posterity and that material sources were not deliberately ‘deposited’ in one place. Rather, they would be found by researchers, as they happened to survive by chance. The children’s statements are therefore predominantly based on the opinion that people in the past did not deliberately deposit artefactual sources. Another explanation is given by 8-year-old Ally (second grade). Not only does she know a multitude of source types (oral tradition, text sources, photographs, images), but she also explains that historical narration – the conscious and deliberate transfer of history by people in written texts, and oral transmission, as well as visual illustrations and representations – would be carried out:

Well, maybe there were some old people and they translated that into books and everybody could read it. Maybe, and they kept on counting it. And then maybe I took some photos. But there were no photos yet. Maybe it’s painted or something.

For some second-grade pupils, sources not only have the specific function of supporting the development of history, but they have been created especially for this purpose (sources of tradition).

Key results: Knowledge of the constructive character of history

Even children in the first two years of school know about the existence of material historical sources that may be complete or incomplete. According to their ideas, they are either discovered after a specific search or found by chance. In their opinion, the artefacts serve as clear evidence of the past. The analysis of the statements of pupils from third- and fourth-grade classes showed that there seems to be no progression in this aspect of their historical understanding. Thus, Cedric (fourth grade) also names finding as a central research method: ‘And if they find armour and stuff like that, they know half of what they’re dressed like.’

The targeted search for artefacts results from the children’s imagination, according to their specific research interest in finding out something about life in the past. Andi explained:

Because the researchers are looking for the things that lived in the old days, so, hmm, they’re looking for it. And so maybe they could find out how they lived in the past. If you dig for it, you might be able to find a knight’s armour. And they might find out that it used to be knight’s armour. Or not.

Expeditions and adventures are the images described to illustrate how historical insights can be gained. In addition, as the first-year pupil Andi’s statement shows, a distinction is already made by some children that a targeted search for objects of the past can also lead to finding out something about the past but only to a limited extent (‘maybe’; ‘or not’). Through the specific use of the terms ‘researching’ and ‘finding out’, the 6-year-old shows that he does not think that these terms mean the same thing. In his opinion, research does not necessarily lead to finding answers.

Already in the first two years of primary school, some children know that the reconstruction of history is not a simple act, but (among other things) is carried out by experts (researchers) who investigate (special) questions in order to answer them as well as possible. The 7-year-old Ameli (first grade) describes the scientific procedure as follows: ‘Because they lived before. And because we just thought: “Are there Romans too?”, and then the experts found out: “There are Romans”. Because there are armours lying around.’
Basically, it is evident that there are two different ideas: the procedure can involve finding by chance, or searching in a targeted way. In addition, the pupils either recognize the source as proof of the past or they interpret the object as evidence, but also recognize, in the sense of reconstruction, that it has to be questioned.

Conclusion and didactic consequences

The study shows that children already have historical knowledge at the beginning of primary school, mainly influenced by (out-of-school) information mediators, such as films, non-fiction and also parents. Children in early schooling also know that the past is passed on and accessible through various media, and they can also name those media. In the opinion of the children, history is handed down by information mediator sources, a finding that contradicts Barton’s (2008) conclusions. The functions of sources are also named, although they are usually presented as clear and concrete evidence. In addition, almost all children can explain that the history can be explored by specialists (‘scientists’, ‘experts’ or ‘researchers’). Historical methodological and media competence can also be described in terms of an initial understanding of the scientific approach to reconstruction.

However, the children’s approach to this will range from accidental finding and/or targeted searching to conscious work, researching with named sources. Activities are therefore described ranging from coincidence to scientifically targeted action. These different conceptions not only refer to pupils in the first two school years, but also to those in the fourth grade. For this reason, the results of our study on teaching didactics are particularly important for the development of a competence development model for historical learning. It becomes clear that historical learning in schools can start in the children’s first year of primary education. The competences of historical thinking are to be promoted from the very beginning in the subject Sachunterricht. Barton (2008: 222) also calls for a different teaching and learning culture for historical learning in primary schools, based on his research results: ‘Elementary students need the opportunity to examine historical evidence first hand – not the tertiary and evidence-free accounts in textbooks, but documents, photographs, objects, oral accounts, and a wide variety of secondary sources.’ This is countered by the fact that in many current curricula and related teaching aids throughout Germany, in the first two years, only an examination of temporal consciousness is planned, which, if one takes into account current research, means that children are not sufficiently challenged in history during their first years in school. (Becher and Gläser, 2013: 169).

Notes on the contributors

Andrea Becher is a primary and secondary school teacher, and teaches didactics of Sachunterricht (general studies) at the University of Paderborn. Her research focuses on competence development in elementary and primary education, textbook research, memory culture for and with primary school children, and Holocaust education.

Eva Gläser is a primary and secondary school teacher, and teaches didactics of Sachunterricht (general studies) at the University of Osnabrück. Her research focuses on competence development in elementary and primary education, textbook research, individual support and performance evaluation, and initial teaching in the classroom.
References


