



# Improving Teachers' Proficiency in Teaching Historical Thinking

*Carla van Boxtel, Jannet van Drie, and Gerhard Stoel*

## INTRODUCTION

This chapter addresses the long-standing attention given to historical thinking in the Dutch history curriculum and the question of how teacher educators can play a role in bringing historical thinking into the classroom. The Netherlands already had a kind of 'historical thinking movement' in the 1970s and 1980s. But despite the long-standing presence of attainment targets concerning historical thinking in the history curriculum, historical thinking is not naturally present in history lessons. In the first part of this chapter we briefly outline the attention for historical thinking in history education in the Netherlands. In the second part we discuss three promising approaches in the initial training and professional development of teachers to bridge the gap between theory and practice.

The first example is a four-year teacher training program in which historical thinking is a core component. The second example comes from a postgraduate teacher training program which prepares teachers for senior secondary education. We describe how preservice teachers in this program extend their theoretical and practical knowledge about how to engage students in historical

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C. van Boxtel (✉)

Research Institute of Child Development and Education/Amsterdam School of Historical Studies, University of Amsterdam, Amsterdam, The Netherlands  
e-mail: [C.A.M.vanBoxtel@uva.nl](mailto:C.A.M.vanBoxtel@uva.nl)

J. van Drie • G. Stoel

Research Institute of Child Development and Education, University of Amsterdam, Amsterdam, The Netherlands  
e-mail: [J.P.vanDrie@uva.nl](mailto:J.P.vanDrie@uva.nl); [G.L.Stoel@uva.nl](mailto:G.L.Stoel@uva.nl)

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thinking and reasoning by doing a design research. The third example presents our experiences with a professional development program for experienced history teachers in which we started with a collaborative analysis of how students reason historically. In the discussion, we look at the challenges that still lie ahead when we want to close the gap between theories about historical thinking and classroom practice.

## DUTCH APPROACHES OF HISTORICAL THINKING

Current theories on the teaching and learning of history emphasize the role of historical thinking. Scholars provide a variety of partly different but also overlapping conceptualizations. Historical thinking competences are often related to historical consciousness.<sup>1</sup> Historical thinking competences are also considered relevant in the context of citizenship education.<sup>2</sup> Participation in deliberations about the common good requires the ability to analyze processes of change and continuity and to identify and reflect on causes and consequences of social problems and possible scenarios for the future. Furthermore, it has been argued that students should be able to critically examine representations of the past in collective memory.<sup>3</sup>

Particularly influential are conceptualizations of historical thinking that focus on historical reading strategies, such as sourcing, contextualization, corroboration, and close reading.<sup>4</sup> In other approaches of historical thinking, metahistorical or second-order concepts play a core role.<sup>5</sup> In these approaches,

<sup>1</sup>The relationship between historical thinking and historical consciousness is discussed by several scholars, for example, Peter Seixas, “Historical Consciousness and Historical Thinking,” in *Palgrave Handbook of Research in Historical Culture and Education*, ed. Mario Carretero, Stefan Berger, and Maria Grever (London: Palgrave Macmillan, 2017), 59–72; Andreas Körber, “Historical Consciousness, Historical Competencies – and Beyond? Some Conceptual Developments within German History Didactics,” 56, *S*, 2015; Carla van Boxtel, “Historical Consciousness. A Learning and Teaching Perspective from the Netherlands,” in *Contemplating Historical Consciousness. Notes from the Field*, ed. Anna Clark and Carla Peck (New York/Oxford: Berghahn, 2019), 61–75.

<sup>2</sup>Keith Barton and Linda Levstik, *Teaching History for the Common Good* (Mahwah, New Jersey: Routledge, 2004).

<sup>3</sup>Helle Bjerg, Andreas Körber, Claudia Lenz, and Olivier von Wrochem, *Teaching Historical Memories in an Intercultural Perspective* (Bielefeld: Metropol, 2013).

<sup>4</sup>See, for example, Sam Wineburg, “Historical Problem Solving: A Study of the Cognitive Processes Used in the Evaluation of Documentary and Pictorial Evidence,” *Journal of Educational Psychology* 83 (1991): 73–87; Abby Reisman, “Reading Like a Historian: A Document-based History Curriculum Intervention in Urban High Schools,” *Cognition and Instruction* 30, no. 1 (2012): 86–112; Jeffrey Nokes, Janice Dole, and Douglas Hacker, “Teaching High School Students to Use Heuristics while Reading Historical Texts,” *Journal of Educational Psychology* 99, no. 3 (2007): 492–504; Susan De La Paz and Daniel Wissinger, “Effects of Genre and Content Knowledge on Historical Thinking with Academically Diverse High School Students,” *Journal of Experimental Education* 83, no. 1 (2015): 110–129.

<sup>5</sup>For example, Peter Lee, “Putting Principles into Practice: Understanding History,” in *How Students Learn: History, Mathematics, and Science in the Classroom*, ed. M. Suzanne Donovan and John D. Bransford (Washington: National Academies Press, 2005), 31–77; Stéphane Lévesque,

historical thinking concerns thinking in terms of change and continuity, causes and consequences, historical evidence, and how a particular action or event can be related to the broader context of historical developments and situations. In most conceptualizations there is not much attention for the role of substantive historical knowledge. In our own framework of historical reasoning this substantive knowledge is also included.<sup>6</sup> We define historical reasoning as a combination of several historical thinking activities that aim at drawing conclusions about the past based upon historical evidence. Students' knowledge of historical facts, concepts, and chronology is one of the resources (next to historical interest, understanding of metahistorical concepts, and epistemological beliefs) that shape the quality of historical reasoning.

In the Netherlands, conceptualizations of historical thinking have always been strongly connected to both the heuristics that are involved when investigating historical sources and the second-order concepts of the discipline, such as change and continuity and causation. The Dutch description of these second-order concepts goes back to the 1970s. In that time, eminent Dutch history teacher educators (e.g., Dalhuisen, Latour, Fontaine, Geurts, and Toebes) wrote about the doing history approach and how to work with historical investigations. They emphasized skills, as, for example, distinguishing fact from opinion, the use of heuristics to examine the trustworthiness of sources, the construction of a historical explanation, historical empathy, and taking into account another one's and your own positionality.<sup>7</sup>

History teacher educator Leo Dalhuisen played an important role in the conceptualization of historical skills. Inspired by Bruner's notion of central concepts and structures of a discipline and the 'new social studies' promoted by Fenton, he developed—in collaboration with the history philosopher Van der Dussen—a system of metahistorical concepts (in Dutch 'structuurbegrippen') and related skills, such as fact and objectivity, change and continuity, historical empathy, causes and consequences, and interpretation.<sup>8</sup> Since the 1980s, these historical thinking concepts have been an important component of the formal Dutch history curriculum. Compared to other subjects that made a shift toward more emphasis on skills in the late 1990s, history was ahead at that time. Dalhuisen developed a history textbook that included a variety of historical

*Thinking Historically. Educating Students for the Twenty-first Century* (Toronto: University of Toronto Press, 2008); Peter Seixas and Tom Morton, *The Big Six Historical Thinking Concepts* (Toronto: Nelson Education, 2012).

<sup>6</sup>Jannet van Drie and Carla van Boxtel, "Historical Reasoning: Towards a Framework for Analyzing Students' Reasoning about the Past," *Educational Psychology Review* 20, no. 2 (2008): 87–110; Carla van Boxtel and Jannet van Drie, "Historical Reasoning: Conceptualizations and Educational Applications," in *The Wiley International Handbook of History Teaching and Learning*, ed. Scott A. Metzger and Lauren McArthur Harris (New York: Wiley-Blackwell), 149–176.

<sup>7</sup>Leo Dalhuisen and Kees Korevaar, *De Methode van Onderzoek in het Geschiedenisonderwijs* [Research Methods in History Education] (The Hague: Van Goor Zoons, 1971); Leo Dalhuisen, Piet Geurts, and Joop Toebes, *Geschiedenis op School. Theorie en Praktijk* [History at School. Theory and Practice] (Groningen: Wolters-Noordhoff, 1977).

<sup>8</sup>Leo Dalhuisen and Jan van der Dussen, *Wat is geschiedenis?* [What is History?] (Haarlem: Gottmer Uitgevers Groep, 1971).

sources and exercises that focused on historical inquiry. The publications *History: What Is it?* (1993) and *That Is History* (2000) of the committee that revised the history examination program were widely used by history teachers and contained many examples of open-ended investigations with historical sources in which students had to apply historical skills.<sup>9</sup>

Until the turn of the century research on the learning and teaching of history was almost absent in the Netherlands. This was—among other things—due to a severe cutdown of expenses for teacher training institutes and a lack of interest in the pedagogy of history in the history departments of universities. From 2000 onwards, we see the development of a strong and also internationally visible community of Dutch history education researchers. Much of this research has revolved around historical thinking and reasoning and focuses on several aspects, such as change and continuity, historical questioning, causes and consequences, historical significance, historical perspective taking, historical empathy, and historical contextualization.<sup>10</sup> These studies contributed to our understanding of what historical thinking and reasoning entail and, particularly, how it can be promoted, for example, by inquiry or writing tasks.

### THE PRESENT HISTORY CURRICULUM: COMBINING OVERVIEW KNOWLEDGE AND HISTORICAL THINKING

In the Netherlands the subject of history is compulsory for students until the age of 14 (pre-vocational track) or 15 (pre-university track). In primary and junior secondary education, there is a national curriculum that prescribes some targets related to historical knowledge and skills.

The targets provide quite some room for schools to decide for themselves about the content of the history curriculum. The main focus is on teaching a

<sup>9</sup>Leo Dalhuisen, *Geschiedenis: Wat is dat?* [History: What is it?] (Den Haag, 1993), and Werkgroep Implementatie Eindexamen Geschiedenis, *Dat is Geschiedenis* [That's History] (Den Haag, 2000).

<sup>10</sup>See, for example, Jannet van Drie, Carla van Boxtel, Jos Jaspers, and Gellof Kanselaar, "Effects of Representational Guidance on Domain specific Reasoning in CSCL," *Computers in Human Behaviour* 21, no. 4 (2005): 575–602; Albert Logtenberg, *Questioning the Past. Student Questioning and Historical Reasoning* (Amsterdam: University of Amsterdam, 2012); Gerhard Stoel, Jannet van Drie, and Carla van Boxtel, "The Effects of Explicit Teaching of Strategies, Second-Order Concepts, and Epistemological Underpinnings on Students' Ability to Reason Causally in History," *Journal of Educational Psychology* 109, no. 3 (2017): 321–337; Geerte Savenije, Carla van Boxtel, and Maria Grever, "Sensitive 'Heritage' of Slavery in a Multicultural Classroom: Pupils' Ideas Regarding Significance," *British Journal of Educational Studies* 62, no. 2 (2014): 127–148; Tessa de Leur, Carla van Boxtel, and Arie Wilschut, "I Saw Angry People and Broken Statues': Historical Empathy in Secondary History Education," *British Journal of Educational Studies* 65, no. 3 (2017): 331–351; Carla van Boxtel and Jannet van Drie, "'That's in the Time of the Romans!' Knowledge and Strategies Students Use to Contextualize Historical Images and Documents," *Cognition and Instruction* 30, no. 2 (2012): 113–145; Tim Huijgen, Carla van Boxtel, Wim van de Grift, and Paul Holthuis, "Toward Historical Perspective Taking: Students' Reasoning When Contextualizing the Actions of People in the Past," *Theory & Research in Social Education* 45, no. 1 (2017): 110–144.

chronological frame of reference focusing on European and Dutch history and consisting of a framework of ten eras with characteristic aspects for each era (e.g., the spread of Christianity in the time of monks and knights) which has to be illustrated using the Dutch Canon (a list of 50 persons and events). Students should be able to use the characteristic features of historical periods to place events, people, and changes in the correct eras and to understand how people lived in these times. The objectives for primary school and junior secondary education do not have much attention for historical thinking; only the competence to use historical sources to construct an image of a historical period is explicitly mentioned. In senior secondary education, both a central examination (developed by a national assessment organization) and school examinations (developed by the teacher) make up the final grade for History. Historical thinking is a core component of the examination program, next to the framework of ten eras. Students, for example, have to be able to take into account the nonlinear and multicausal character of historical phenomena and events, identify types of causes and consequences (e.g., direct, indirect, short term, long term, intended, unintended, more or less significant consequences based upon scale, intensity, duration), and understand that each explanation is an interpretation.<sup>11</sup>

The same kind of objectives are given for thinking about continuity and change. Students have to be able to identify types of change (e.g., tempo, duration, scale, intensity, political/social-economical/cultural), recognize that every time bears in itself material and immaterial traces of the past, deal with the difference between unique and generic meanings of historical concepts, and explain that every analysis of continuity and change is an interpretation. Only recently is there more attention for the second-order concept 'historical significance' under the header 'significance nowadays'. Students should understand the changing significance of past events, persons, and developments for different groups of people and recognize various present motives, values, and expectations when people make moral judgments about the past. Thus, attainment targets mention not only the second-order concepts and related strategies, but also the understanding of historical narratives as constructions of the past.

As explained above, historical thinking concepts and skills have been an important part of the Dutch history curriculum since the 1980s. Around the turn of the century, there was a major shift in the history curriculum. The thematic approach that was common in senior secondary education was replaced by a curriculum that was more dominated by a chronological frame of reference consisting of ten eras with characteristic features.<sup>12</sup> This curriculum reform

<sup>11</sup> Board of Examinations, *Geschiedenis HAVO en VWO. Syllabus Centraal Examen* (Arnhem: CEVO, 2013).

<sup>12</sup> Commissie Historische en Maatschappelijke Vorming, *Verleden, Heden en Toekomst* [Past, Present and Future] (Enschede: SLO, 2001).

was for an important part shaped by political agendas.<sup>13</sup> Politicians made the case for more shared knowledge of the past, which was expected to contribute to social cohesion and citizenship. Furthermore, there were complaints about the assumed loss of knowledge of significant dates and persons as a result of the more thematic approach and the attention for historical thinking. The implementation of the ten-era framework—which is assessed in the central examination—resulted in a strong focus on using overview knowledge of national and European history to situate concrete persons and events in time. Historical skills, however, did not lose their place in the curriculum. They were now called historical thinking and reasoning skills and the formulation was adapted to conceptualizations used in history education research abroad and in the Netherlands.

Recently, the government has initiated a large-scale curriculum reform of all subjects in primary and secondary education. The implications for the attention for historical thinking skills are not clear yet. The curriculum reform aims at more horizontal (between subjects) and vertical (from primary to senior secondary education) coherence and attention for citizenship, personal development, and twenty-first-century skills. The idea of ‘teachers in the lead’ resulted in a curriculum development team consisting of only teachers and school directors. Teacher educators, researchers, and associations of teachers can provide feedback. The association of history teachers argued that historical thinking and reasoning should be the core component of the new curriculum.<sup>14</sup> The curriculum development team for social studies (in the Netherlands comprising History, Geography, Economics, Social Science, and Civics) is working on a set of competences that are common for the social studies, such as thinking in terms of change and continuity, causes and consequences, multiple perspectives, interactions, and structures.<sup>15</sup> This may result in more attention for historical competences in primary and junior secondary education.

### TEACHER EDUCATORS’ EFFORTS TO ENHANCE HISTORICAL THINKING IN THE CLASSROOM

In the Netherlands teacher education is organized in three different programs. For primary education, preservice teachers follow a four-year program at the bachelor level at Colleges for Teacher Training. They are qualified to teach all subjects across the entire age range in primary school (ages 4–12). The preservice teachers come from senior secondary education (the track that prepares for university of applied sciences) or from secondary vocational schools. At the

<sup>13</sup> Arie Wilschut, “History at the Mercy of Politicians and Ideologies: Germany, England and the Netherlands in the 19th and 20th centuries,” *Journal of Curriculum Studies* 42, no. 5 (2010): 693–723.

<sup>14</sup> Vereniging van Docenten Geschiedenis en Staatsinrichting in Nederland, *Bij de tijd 3. Geschiedenisonderwijs voor de toekomst* [Up to Date 3. History Education for the Future] (2018).

<sup>15</sup> Curriculum.nu, *Vierde tussenproduct Ontwikkelteam Mens en Maatschappij* [Fourth Interim Product Design Team Social Studies] (January 2019).

colleges there is only limited time for history and the pedagogy of history. Secondary school teachers are qualified either to teach in junior secondary education (ages 12–14) and senior pre-vocational education (ages 14–16) or to (also) teach in the tracks in senior secondary education (ages 15–18) that prepare for university of applied sciences or university. The qualification for junior secondary and senior pre-vocational education can be obtained by a program of four years at the bachelor level, comprising courses on history, the teaching of history, and general pedagogy.

The qualification to teach history in senior secondary school can be obtained by a two-year program at the master level or a one-year postgraduate program for those who already have a master's in history. During the final stages of initial teacher training, a preservice teacher teaches around four to six hours a week in school as an intern. The preservice teacher is mentored by a history teacher educator working at the university and a history teacher from the school. Although in all teacher training programs, the time for history-specific pedagogy is limited, due to the time that is spent in internship, general pedagogical competences, or the content of history, preservice teachers are trained to teach historical thinking and reasoning. The time devoted to historical thinking, however, differs per program.

Overall, history teacher educators are well informed about conceptualizations of historical thinking and reasoning in the national and international literature. An increasing number have a PhD in history education (often focusing on aspects of historical thinking and reasoning). In the four-year teacher training program many educators use a textbook that focuses on historical thinking.<sup>16</sup> This textbook contains concrete examples of historical thinking, assignments to engage student teachers in historical thinking, and examples of how to enhance historical thinking in the classroom. At the master and postgraduate level, the emphasis is less on developing students' historical thinking competence, but more on the philosophical underpinnings of historical thinking, insights from empirical research, and strategies for teaching and assessing historical thinking and reasoning.

Publications on historical thinking are widely used. Furthermore, many teacher educators make use of the Active Historical Thinking publications developed by a group of Dutch history teachers and educators. These publications contain ready-to-use and easy-to-adapt exercises that aim at active engagement in historical thinking. The exercises (e.g., 'odd-one-out', 'mystery', and 'images debated') are well structured, but open-ended and mostly done in small groups.<sup>17</sup>

<sup>16</sup>Dick van Straaten (Ed.), *Historisch denken. Basisboek voor de Vakdocent* [Historical Thinking. Handbook for the History Teacher] (Assen: Van Gorcum, 2016).

<sup>17</sup>Harry Havekes, Arnoud Aardema, and Jan de Vries, "Active Historical Thinking: Designing Learning Activities to Stimulate Domain-specific Thinking," *Teaching History* 139 (2010): 52–59; Harry Havekes, Carla van Boxtel, Peter-Arno Coppen, and Johan Luttenberg, "Knowing and Doing History. A Conceptual Framework and Pedagogy for Teaching Historical Contextualisation," *International Journal of Historical Learning, Teaching and Research* 11, no. 1 (2012): 71–92.



## HISTORICAL THINKING AND REASONING IN THE CLASSROOM

We have to be careful in making statements about the extent to which teachers in the Netherlands engage their students in historical thinking and reasoning, because hardly any research has been done. Based upon the results of some small-scale studies and our own experiences, we think that, despite the position of historical thinking and reasoning in the curriculum and teacher education programs, in general the instructional focus on historical thinking is still limited.

It is promising that current history textbooks, which are commonly used in the Netherlands, contain a rich variety of sources and exercises that focus on historical thinking and reasoning. However, we do not know to what extent teachers really use these exercises. Furthermore, there is the difficulty that the textbooks are offering contradictory messages. The core of the textbook is a text about the characteristic aspects of the ten-era framework in a narrative format. The chronological frame of reference is translated into a rather fixed narrative. This narrative reads like an ultimate story of what happened. The textbook analysis by Kropman, van Drie, and van Boxtel shows that the author's voice and multiple perspectives present in historiography are almost absent in the history textbooks.<sup>18</sup> In this sense, textbook narratives are not supportive in the development of students' historical thinking and reasoning competences.

The interview study of Tuithof provides some insights in the ways Dutch history teachers struggle with combining the teaching of overview knowledge and historical thinking skills.<sup>19</sup> Tuithof interviewed history teachers several times during the implementation of the new examination program with the ten-era framework and studied changes in their pedagogical content knowledge (PCK). She found that it was difficult for teachers to adapt their PCK when their teaching orientation (with a focus on historical thinking) did not match with the new curriculum.

There are only two small-scale observation studies, which inform us how teachers engage their students in historical thinking and reasoning. Huijgen and colleagues observed eight history teachers twice and looked at how they promoted historical contextualization in their lessons.<sup>20</sup> The results indicate that the teachers demonstrated some historical contextualization, but hardly actively engaged their students in historical contextualization processes. Gestsdóttir, van Boxtel, and van Drie included ten lessons of eight Dutch history teachers in a study that aimed at the development of an observation instru-

<sup>18</sup>Marc Kropman, Jannet van Drie, and Carla van Boxtel, "Multiperspectivity in the History Classroom. The Role of Narrative and Metaphor," in *Narrative and Metaphor in Education. Looking Both Ways*, ed. Michael Hanne and Anna Kaal (Abingdon, UK/New York: Routledge, 2018), 63–75.

<sup>19</sup>Hanneke Tuithof, *The Characteristics of Dutch Experienced History Teachers' PCK in the Context of a Curriculum Innovation* (Utrecht: Utrecht University, PhD diss. 2017).

<sup>20</sup>Tim Huijgen, Paul Holthuis, and Carla van Boxtel, "Promoting Historical Contextualization: An Observational Study," *Educational Studies* (2018, online first).



ment focusing on the teaching of historical thinking and reasoning.<sup>21</sup> These teachers were selected because the researchers expected that the teachers would demonstrate at least part of the behavior that was included in the instrument, for example, because they were actively engaged in professionalization activities focused on historical thinking. They found that in three of the ten observed lessons teachers showed behavior that was considered to reflect the teaching of historical thinking and reasoning to some extent or to a large extent. In most lessons, only few of the behavioral indicators were observed. The teachers mainly demonstrated historical thinking and used historical sources to support historical thinking. In almost all lessons, teachers engaged students in historical thinking and reasoning by providing individual or group assignments. In only half of the lessons teachers communicated learning objectives related to historical thinking goals. Furthermore, showing that there are multiple perspectives or interpretations and explicit instruction about historical thinking strategies were absent in almost all lessons.

#### BRIDGING THE GAP BETWEEN THEORY AND CLASSROOM PRACTICE

Despite the fact that historical reasoning is part of the curriculum and has its place in teacher education programs, implementing it in the classroom remains difficult. Below, we discuss three approaches that aim to bridge this gap.

##### *Historical Reasoning as a Core Component in a Four-Year Teacher Training Curriculum*

In this paragraph, we describe the systematic attention for historical reasoning in the curriculum of one of the nine higher education institutions in the Netherlands that offer a four-year program qualifying for junior secondary education and upper pre-vocational education. The program focuses on subject matter, general pedagogical and history-specific pedagogical knowledge, and skills.

This four-year program starts with a course about historical reasoning that aims to make preservice teachers more familiar with the discipline of history and to develop their historical reasoning competences. During the course preservice teachers become familiar with the critical examination of historical sources, the construction of historical explanations, historical perspective taking, and periodization. Furthermore, they investigate to what extent types and components of historical reasoning are present in history textbooks and lessons at their school. Subsequent courses in the first year focus on historical periods and history-specific pedagogy. In the history-specific pedagogy course,

<sup>21</sup> Susanna Gestsdóttir, Carla van Boxtel, and Jannet van Drie, "Teaching Historical Thinking and Reasoning: Construction of an Observation Instrument," *British Educational Research Journal* 44, no. 6 (2018): 966–981.

connections are made with the historical reasoning course. At the end of the first year, preservice teachers' subject matter and (history-specific) pedagogical knowledge and skills are assessed with an integrative performance task in which students design a lesson that also includes attention for the development of historical reasoning competences. At the end of this first year, the teacher educators want to see that students have moved beyond the idea that the learning of history concerns the reproduction of historical facts.

In the second year, there is a second course about historical reasoning focusing on conceptualizations of historical reasoning. Again, preservice teachers have to apply their understanding of historical reasoning, not only by analyzing lessons and textbooks, but also by analyzing student work. Which aspects of historical reasoning are difficult for students? What is their students' level of reasoning? Furthermore, they have to design a lesson in which they put one of the metahistorical concepts (e.g., change) at the center, formulate a historical question, and ask students to work with historical sources. The choices students make have to be justified by theory about historical reasoning. The final assessment at the end of the second year is again a design task. Preservice teachers develop an 'Escape the History Classroom' assignment in which they need to include all components of historical reasoning, using the historical reasoning framework of van Boxtel and van Drie.<sup>22</sup> At this level, teacher educators indicate that students still have difficulties with adjusting their lessons to the needs, prior knowledge, and experiences of their students. At the end of the second year, the overarching goal is that students are able to explicate goals related to different components of historical reasoning. In the last two years of the curriculum, taking into account students' interest, knowledge, and needs gains more attention.

In the third year, there is much emphasis on the internship. Next to that, preservice teachers follow courses about historical topics and theory of history. The courses about historical topics have been developed according to a diachronic approach and the six historical thinking concepts that are described by Seixas and Morton.<sup>23</sup> They write a historical article about a topic of their choice based upon both primary and secondary sources, demonstrating their own historical reasoning skills. The course about the theory of history builds upon the historical reasoning courses and places the historical reasoning constructs in a broader scientific framework.

In the final year preservice teachers conduct a practice-oriented design research, in which they investigate a question of their own choice. Only few choose to focus on a question related to the learning and teaching of historical reasoning. A problem mentioned by the teacher educators is that during their practice-oriented research, preservice teachers often rush to a concrete instructional strategy (e.g., using a step-by-step instruction or checklist), whereas they have less attention for an in-depth analysis of how students actually reason

<sup>22</sup> Van Boxtel & Van Drie, "Historical Reasoning," 2018.

<sup>23</sup> Seixas and Morton, *The Big Historical Thinking Concepts*, 2012.

about past developments and a broader exploration of potentially effective instructional strategies.

*Engaging Preservice Teachers in Design Research Within Their Own Classroom Practice*

An important characteristic of the postgraduate and two-year master programs is the attention for conducting (design-based) practice-oriented research. Over the past decade, the role of (design) research in Dutch schools has developed greatly. This can be witnessed, for example, by an increase in professional learning communities, lesson-study groups, and teacher design teams. Because of their academic background, teachers with a university degree often play a central role in these design activities. In order to support this role, teacher training programs at the university level include educational design research and methods of educational design in their programs. The educational design course that we discuss is part of the core curriculum of the history teacher training program at our own university.

The central aim of the Educational Design course is for preservice teachers to learn how they can systematically analyze, design, and evaluate aspects of their teaching using theories and methods of the educational sciences and history-specific pedagogy. To connect with the different types of research that exist in current educational practice, preservice teachers can choose one out of three types of research. First is developing a prototype based on theory and an analysis of requirements and students' prior knowledge and interest, which is validated by feedback from experts and try-outs with part of the materials. Second is improving a teaching or learning activity in three iterations. Each iteration is evaluated and based upon the outcomes the activity is improved. Third is investigating the learning outcomes of an instructional approach, for example, by conducting an intervention study using a pre-test, post-test, or quasi-experimental design.

All three variations encompass the three phases of design research: (1) prior research to analyze the problem and the aspects that lie behind the problem; (2) developing learning materials or lessons based on design principles; and (3) validating (a prototype) or evaluating (when the design is implemented).<sup>24</sup> In the first phase, preservice teachers decide upon the problem or ambition they want to address. In this phase, students consult literature to define the learning outcomes, learning activities, or the knowledge gap their research will focus on. They elaborate on the difficulties that students or teachers themselves might have with an aspect of the curriculum. For example, preservice teachers focus on the teaching of causal historical reasoning, contextualization, historical significance, or working with historical sources. Alternatively, they focus on a specific instructional approach to enhance historical thinking, for example,

<sup>24</sup>Tjeerd Plomp and Nienke Nieveen (Eds.), *An Introduction to Educational Design Research* (Enschede: SLO, 2009).

collaborative learning, explicit instruction, or whole-classroom discussion. Simultaneously, they collect empirical data in their own classroom to explore the nature of the problem in their own practice. Oftentimes, thinking-aloud interviews or task analysis are used to determine how students reason historically, and which steps they do (and do not) take.

After the problem analysis, literature is consulted to define design principles that might ‘solve’ the problem. These principles can be derived from general pedagogical literature and from domain-specific literature. The final step in this process is the formulation of a hypothesis that summarizes and (causally) relates the problem, the design principles, and the expected outcomes/desired results. Parallel to designing their lessons or learning activity, preservice teachers develop a research plan. They establish the goals of their research, operationalize the variables in their hypothesis, decide on adequate research instruments, and oftentimes develop these instruments based on their theoretical framework (e.g., interview protocols, reasoning tasks, or learner reports).

To illustrate this, we give an example of an intervention study in which a preservice teacher focused on students’ epistemological beliefs. The preservice teacher formulated the hypothesis in the following way:

Pupils often believe that historical knowledge is objective and that historical sources contain this objective knowledge. To influence [these] epistemological beliefs of my 11th-grade pupils and train them to construct a nuanced and well-supported narrative about the past, I developed a lesson unit that centers on provocative questions that must be answered using multiple, contradicting sources, and pays explicit attention to inquiry skills. After the lesson unit, I expect pupils to be more aware of the interpretative nature of historical knowledge. Secondly, I expect pupils to include contradictions between sources more often, to contextualize sources better, to account more explicitly for the origin and characteristics of the sources and support their conclusions with more evidence.

A questionnaire on epistemological beliefs about history and a learner report were used to assess changes in students’ beliefs.<sup>25</sup> Furthermore, a short document-based question was used to assess task performance. The performance task and questionnaire were deployed as a pre- and post-test.

An example that illustrates developing and validating a prototype is the case of a student teacher aiming at redesigning an assignment on oral history and migrant stories in students’ own environment. In this case, the history department at the school suggested the topic. The assignment was originally developed to support learning about large historical developments of the second half of the twentieth century (e.g., Cold War, decolonization, postwar sociocultural

<sup>25</sup> Gerhard Stoel, Albert Logtenberg, Bjorn Wansink, Tim Huijgen, Carla van Boxtel, and Jannet van Drie, “Measuring Epistemological Beliefs in History Education: An Exploration of Naïve and Nuanced Beliefs,” *International Journal of Educational Research* 83 (2017): 120–134.; Baukje van Kesteren, “Applications of de Groot’s ‘Learner Report’: A Tool to Identify Educational Objectives and Learning Experiences,” *Studies in Educational Evaluation* 19 (1993): 65–86.

developments, and the development of a diverse and multicultural society) by supporting it with concrete stories. However, the teachers of the department concluded that although students found it interesting and enjoyed collecting the stories, no connections were made between the personal stories and the larger historical processes.

Based on a theoretical framework about the importance of multiperspectivity and the role of contextualization, the preservice teacher defined several principles and designed a new assignment. He validated this prototype by interviewing several experts: an academic who focused on history learning and heritage institutions, sensitive topics, and perspective taking; a teacher who participated in an oral history project; and several students. He used the feedback to improve the design principles and the final prototype.

For most preservice teachers, the educational design course is a demanding course. This has to do, first of all, with the number of steps students have to take and the time constraints of the course. Furthermore, history preservice teachers are in general unexperienced in the methods of social sciences and the domain of learning theories, which increases their learning curve. Teacher educators try to support preservice teachers with workshops about conducting interviews, thinking-aloud sessions, content analysis, and intervention studies. Furthermore, preservice teachers who have had roughly 50 hours of experience in practice are often still focused strongly on classroom management and their role as teachers (Fuller and Bown 1975). Consequently, preservice teachers sometimes experience a gap between the goals of the teacher education and everyday practice (see also Korthagen 2016).

However, many preservice teachers (sometimes in retrospect) report to have learned a lot from the academic rigor and the acquaintance with the body of research on historical teaching and learning. In their reflections, preservice teachers indicate that they have developed a deeper understanding of concepts related to historical reasoning (e.g., change and continuity, or chronology) and of the problems students experience with these concepts. This learning is strengthened by the critical and systematic way in which the course made them look at their own practice and at the reasoning of their students. One preservice teacher put it like this:

I develop quite a lot of lesson materials, but I never dive in the existing literature and I also do not evaluate the outcomes as thoroughly as we were expected to do in this course. The most important learning result for me [...] was that] when developing future lessons, I need to start with defining clear goals for my pupil's and also define tasks [...] that allow me to make [the goals] assessable.

### *Analyzing Students' Historical Reasoning in a Professional Development Program*

Another approach to improve teachers' skills in teaching historical thinking is through professional development programs (PDPs). An example of such a

PDP is *Beyond the facts. Improving causal reasoning in the history classroom* conducted in 2016–2017.<sup>26</sup> This program aimed at improving the teaching of causal reasoning in secondary education; teaching causal reasoning requires, among others, that teachers have prior knowledge of students' way of reasoning and the problems they encounter. They need knowledge of students' reasoning in different school years and their progression. The main characteristic of this PDP was the analysis of students' causal reasoning as collaborative activity, to provide teachers with insights in the conceptions, misconceptions, and ways of reasoning of students in various years. The idea was that this knowledge would better enable them to select appropriate teaching methods and materials that were tailored to the actual level of their students.

In the preparatory phase a group of five teachers and two researchers developed a rubric for causal reasoning, based on the collaborative analysis of students' answers on three different causal reasoning tasks collected over different age groups. Furthermore, the rubric was grounded in previous research on causal historical reasoning. The rubric describes four levels on six criteria: reasoning with multiple causes, making causal connections, using historical concepts, drawing conclusions, backing claims with evidence, and understanding multiple explanations.<sup>27</sup> Subsequently, concrete lessons for teaching causal reasoning were developed. Six design principles (largely based on the work of Stoel, van Drie, and van Boxtel) were introduced: formulate explicit goals on causal reasoning, diagnose students' reasoning prior to the lesson, formulate a complex causal question guiding the lesson, teach causal reasoning explicit, design open and active assignments that include group work, offer different learning paths.<sup>28</sup>

The rubric and the model lessons were subsequently used as input in a PDP with a broader group of history teachers. The first part of the PDP repeated the collaborative activity to analyze students' causal reasoning. Participating teachers analyzed a preselected sample of students' causal reasoning, first without the rubric (thus eliciting their own prior knowledge) and then by using the rubric. The second part of the PDP focused on using this knowledge for developing lessons. In this phase the model lessons were presented and discussed by the teachers. In the final part of the PDP, teachers started to design their own lessons and received feedback from each other and the two trainers. In the following weeks, they conducted these lessons.

In the PDP, 11 experienced history teachers participated, each with one class, varying from grade 7 to 11 (263 students in total). The effects of the PDP were evaluated both on teachers' development and on students' learning experiences. The researchers conducted questionnaires at various moments,

<sup>26</sup>This project was funded by the Netherlands Organization for Scientific Research (grant number 405-16-508).

<sup>27</sup>The rubric (in Dutch) can be found at <http://www.expertisecentrum-geschiedenis.nl/de-feiten-voorbij/rubric>

<sup>28</sup>Stoel et al., "The Effects of Explicit Teaching," 2017.

interviewed teachers, and made observations of the lessons. In addition, students' learning experiences with the lessons were measured using a learner report.<sup>29</sup>

Outcomes showed that teachers felt more confident in teaching causal reasoning, especially with respect to their ability to diagnose students' causal reasoning. Teachers reported more insight in the construct of causal reasoning and in the knowledge on students' conceptions and misconceptions. This enabled them to provide students with more specific feedback and to design lessons that were more tailored to the actual level of students' reasoning. Teachers indicated that the activity of collaboratively discussing students' reasoning gave them a lot of insights and diminished the gap between theory and their own teaching practices. The rubric was often mentioned as a powerful tool for analyzing student reasoning and gaining more insight into the problems students face. It helped in formulating specific learning goals and activities for engaging students in causal reasoning.

The observation of the lessons showed that the teachers used the six design principles. Almost all teachers used a diagnostic task to gain insight into students' prior knowledge. The teachers all explicitly formulated learning goals for causal reasoning, next to more content-related learning goals, and used an overarching causal question for their lesson. Examples of questions were: Why did Napoleon, who was an excellent general, lose the battle of Waterloo? Why did the Amsterdam 'Botermarkt' (Buttermarket) receive a new name in the nineteenth century and was called 'Rembrandtplein' (Rembrandtsquare)? How can the end of the Cold War be explained? These questions guided all activities in the lessons and were collaboratively answered at the end of the lesson. A diversity of open and active historical thinking activities were used to answer the main question. For example, selecting causes from different sources or a schoolbook text, ordering causes in different categories (i.e., political, economic, and social-cultural causes or consequences; or direct and indirect causes), or constructing schemes such as a causal map or a diamond nine for determining the significance of causes.<sup>30</sup>

Explicit instruction on causal reasoning was part of all lessons. Timing differed, however: sometimes at the start of the lesson, sometimes afterwards when discussing the outcomes on the overarching question. The latter was done, for example, by explicitly discussing with students what they had learned about causation in history, or why answers on the overarching can differ and still not be wrong. In the interviews, teachers highlighted the importance of explicit teaching of historical reasoning, as it often remained implicit in their lessons. Three teachers took up the challenge of offering different learning paths. Based on the diagnosis, students could choose which learning path they would take. Most often, these paths were more or less teacher-centered

<sup>29</sup> Van Kesteren, "Applications of De Groot's Learner Report," 1993.

<sup>30</sup> Arthur Chapman, "Camels, Diamonds and Counterfactuals: A Model for Teaching Causal Reasoning," *Teaching History* 112 (2003): 46–53.



(working on the main task independently; working on the main task with the use of guiding materials; following direct instruction of the teacher). Although these teachers were positive about the results of these personalized trajectories, other teachers indicated that this approach was too far away from their current practice.

The analysis of the learner reports showed that students appreciated the lessons. The large majority of the 263 students agreed or completely agreed with the statement: 'I know now better how to work with causes and consequences in history.' Students who agreed with the statement subsequently indicated that this was foremost due to the assignments. They appreciated the open-ended, active, and collaborative characteristics of the assignments. As one of the students (grade 10) reported: '*We worked collaboratively on assignments, I like that, I pay more attention and remember the content better*'. Compared to 'ordinary' history lessons students experienced these lessons to be more fun, interesting, relevant, and challenging. From this evaluation, we conclude that focusing on the analysis of students' reasoning in a PDP is a fruitful approach for teaching causal reasoning. It provided teachers with more insight in what causal reasoning entails and students' ways of reasoning, which subsequently helped them design lessons that focused on causal reasoning, adapted to the level of students. This approach could be easily extended to other types of historical reasoning.

## DISCUSSION

In this chapter we addressed the question how teacher educators can play a role in bringing historical thinking and reasoning in the classroom and bridging the gap between aims that are well-described in theory and classroom practice. First of all, we have to remark that although some small-scale studies indicate that in the Netherlands engaging students in historical thinking and reasoning is not naturally present in the history lessons in secondary school, we do not know much about the extent to which and how Dutch history teachers pay attention to the development of historical thinking and reasoning competences. The recently developed observation instruments can be useful to investigate this on a larger scale and to make a comparison with the teaching of historical thinking in countries that have a similar or different curriculum and/ or teacher education program.<sup>31</sup>

The problem of teaching historical thinking is not only confined to the Netherlands. Scholars in other countries have noticed the gap between theory and practice.<sup>32</sup> Reisman notes that although teachers acknowledge the value of

<sup>31</sup> Gestsdóttir, "Teaching Historical Thinking and Reasoning", 2018.

<sup>32</sup> See, for example, Keith Barton and Linda Levstik, "Why Don't More History Teachers Engage Students in Interpretation?" *Social Education* 67, no. 6 (2003): 358–361; Bjorn Wansink, Sanne Akkerman, and Theo Wubbels, "The Certainty Paradox of Student History Teachers: Balancing between Historical Facts and Interpretation," *Teaching and Teacher Education* 56 (2016): 94–105.

teaching historical thinking, they do not adopt such an approach easily.<sup>33</sup> Voet and De Wever point to the difficulty of understanding what it actually entails to teach historical thinking.<sup>34</sup> In the Netherlands, we can see the following constraining factors. First, the chronological frame of reference of ten eras has been translated into an overloaded overview of historical periods and developments, which puts pressure on the time available for teaching historical thinking competences. We need more examples of how students can appropriate a chronological frame of reference to situate events, developments, persons, and historical sources in time without overloading them with a long list of to be learned facts, dates, persons, and concepts. Elsewhere, we pointed to the possibility of focusing on colligatory concepts and landmarks.<sup>35</sup>

A second constraint is the text in history textbooks. In the Netherlands, textbooks shape for an important part how teachers teach and how students learn history. Although the textbooks contain historical thinking activities, the texts themselves are mostly constructed as a single narrative that is presented as objective truth. Textbook authors should think about ways to communicate to the students that the text is written by someone who has asked questions, and selected and constructed a particular interpretation. Also, it should be more visible for students that regarding some questions there are multiple plausible answers possible.<sup>36</sup> Students can also investigate how the meaning assigned to historical people and events that are part of the core curriculum changed over time. In this way teachers can both teach overview knowledge and enhance students' understanding of multiple perspectives and history as interpretation.

In teacher education, particularly in the one- and two-year programs, a constraining factor is that preservice teachers' concerns are often more with classroom management than with learning to teaching historical thinking competences. In this context it is important to make a clear connection with the student's own teaching context, as is the aim of the educational design course that we discussed, in particular to start with a teaching problem that the preservice teacher himself or herself encounters. This point also makes clear the need for continuous professionalization of teachers.

More knowledge is needed on exactly what knowledge and skills preservice teachers need to teach historical thinking to their students. Thus far, research on preparation of history teachers is still rare and rather particularistic.<sup>37</sup> What

<sup>33</sup> Reisman, "Reading Like a Historian," 2012.

<sup>34</sup> Michiel Voet and Bram de Wever, "Effects of Immersion in Inquiry-based Learning on Student Teachers' Educational Beliefs," *Instructional Science* 46, no. 3 (2018): 383–403; Michiel Voet and Bram de Wever, "Preparing Pre-service History Teachers for Organizing Inquiry-based Learning: The Effects of an Introductory Training Program," *Teaching and Teacher Education* 63 (2017): 206–217.

<sup>35</sup> Van Boxtel and Van Drie, "That's in the Time of the Romans!," 2012.

<sup>36</sup> This is, for example, addressed by Richard Paxton, "The Influence of Author Visibility on High School Students Solving a Historical Problem," *Cognition and Instruction* 20, no. 2 (2002): 197–248.

<sup>37</sup> Chauncey Monte-Sano and Christopher Budano, "Developing and Enacting Pedagogical Content Knowledge for Teaching History: An Exploration of Two Novice Teachers' Growth over

are the ingredients of a teacher education and a professionalization program that promotes the teaching of historical reasoning? First, we think it is important that preservice teachers and experienced teachers acquire insight in what historical reasoning entails.

This can be achieved, for example, by engaging in historical thinking and reasoning themselves (e.g., through assignments in courses that aim at historical content knowledge) or by (collaboratively) analyzing and discussing students' thinking and reasoning. Second, preservice teachers and experienced teachers can be supported by frameworks and tools that define historical thinking and reasoning in terms of concrete student behavior. For example, the rubrics used in the PDP that we discussed and that shows progression in historical thinking skills. Other examples are the historical thinking concepts and guiding posts developed by Seixas and Morton and the framework for analyzing historical reasoning developed by van Boxtel and van Drie.<sup>38</sup>

These tools can be used to analyze student work and to design learning activities that enhance historical thinking. Observation instruments can support student teachers and teachers in getting a better idea of what they can do in order to *teach* historical thinking and reasoning, such as demonstrating historical thinking when giving instructional explanations, providing explicit instruction about a particular historical reasoning strategy, or enhancing students' historical reasoning in the context of a whole-class discussion. In all the three examples that we presented, teacher educators tried to show that enhancing historical thinking in the classroom does not necessarily involve 'doing things with historical sources'. There are other types of activities that can promote students' historical thinking. More research, for example, is needed on the potential of creative tasks to enhance students' motivation to engage in historical thinking and reasoning. Future research should also focus on the impact of teacher preparation and professional development programs on the teaching of historical thinking and the effect on student learning. The approaches that we discussed seem promising. They all suggest the operationalization of historical thinking and reasoning in terms of concrete student behavior, a focus on students' thinking and promotion of professional experimentation with approaches to improve students' historical thinking competences, acknowledging the context (e.g., school, curriculum) in which the teachers operate.

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Three Years," *Journal of the Learning Sciences* 22, no. 2 (2013): 171–211; Stephanie van Hover and David Hicks, "History Teacher Preparation and Professional Development," in *The Wiley International Handbook of History Teaching and Learning*, ed. Scott A. Metzger and Lauren McArthur Harris (New York: Wiley-Blackwell, 2018), 391–418.

<sup>38</sup>Seixas and Morton, *The Big Six*, 2013; Van Boxtel and Van Drie, "Historical Reasoning," 2018.

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