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Observing history teaching

Historical thinking and reasoning in the upper secondary classroom

Gestsdóttir, S.M.

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6 General conclusions and discussion

1. Introduction

Knowing what actually goes on in history classes is of interest, even to a researcher who has more than a fair inkling. However, it should come as no surprise that a lot goes on in any given lesson and the opportunities for exploration are varied and many. It is therefore imperative to narrow the focus to draw out the desired information. In this dissertation we examined the teaching of historical thinking and reasoning (HTR). They are among the skills that have been prominent in discussions on history teaching for the past decades. Our aim was to operationalize the elements of HTR in terms of teacher behaviour. These elements are already well documented in the literature (e.g. Chapman, 2011; Lee & Shemilt, 2004; Maggioni et al., 2006; Monte-Sano, 2011a; Seixas & Morton, 2013; Van Boxtel & Van Drie, 2018), but apparently are problematic for teachers to enact (c.f. Barton & Levstik, 2003; Reisman, 2012). We wanted to see how this operationalization of teaching HTR and the observation instrument based on it could be used in initial teacher training or professional development programs to solve this issue. The studies we made to this avail were guided by the following research questions:

1. How can the teaching of historical thinking and reasoning be operationalized and observed in upper secondary education?
2. To what extent do Icelandic history teachers teach historical thinking and reasoning at the upper secondary level?
3. Which beliefs about goals and strategies of teaching history play a role in Icelandic teachers' inclinations towards teaching historical thinking and reasoning?
4. How can the use of an observation instrument enhance the professional growth of history student teachers and history teachers in the teaching of historical thinking and reasoning?

The outcome of each study is discussed in relation to the relevant research question, before concluding with a general discussion and implications for practice and further research.

2. Main findings

RQ1: How can the teaching of historical thinking and reasoning be operationalized and observed in upper secondary education?

In our first study we made a literature review to identify which teaching behaviours are characteristic of a teaching approach that stimulates HTR. The purpose was to develop an observation instrument where these elements were operationalized so that they could be observed in the classroom. When the first version of the instrument and examples of teacher behaviour had been drafted we sought the assistance of a group of 11 experts in history teaching from eight countries. Based on their identification of strengths and weaknesses of the instrument and suggestions for more examples of behaviour, it was further developed. The final instrument contained seven categories that had to be scored on a Likert scale of 1-4. To support this evaluation for each HTR category, we included behavioural indicators (in total 33 items) that could be checked. The categories are 1) the teacher communicates learning objectives related to the development of students' HTR ability, 2) the teacher demonstrates HTR, 3) the teacher uses historical sources to support HTR, 4) the teacher makes clear that there are multiple perspectives and interpretations, 5) the teacher provides explicit instructions on HTR strategies, 6) the teacher engages students in assignments that ask for HTR and 7) the teacher engages students in a whole class discussion that requires HTR.

After gaining an overview of the literature and the experts' review, the third step in the development of the instrument was to assess its inter-rater reliability and internal consistency by using 10 videotaped history lessons in Iceland as a pilot. A percentage of complete agreement between two coders (the first author and a trained student from a master's program in history teaching) was calculated. It ranged from 60% to 90%. When the coders disagreed, the first coder had assigned a higher score (observed more items of the instrument) than the second coder in almost all cases. This may be due to her longer teacher and observation experience, as well as her expertise in the field of historical thinking and reasoning. Intraclass correlation coefficients (ICC; Hallgren, 2012) were also calculated for each of the categories above. The first category, 'communicating learning objectives that focus on HTR', and the fourth one, 'making clear that there are multiple perspectives and interpretations', showed poor agreement (.23 and .36). Apart from that, the ICC ranged between 0.51 and .72 (good

agreement) (Cicchetti, 1994). We also assessed the internal consistency for the seven categories combined. Using the codes of the first coder, Cronbach's alpha was .61. We considered .70 to be an acceptable reliability coefficient. A strong point was that the results of the observations made it possible to distinguish between lessons where the teaching of HTR was hardly visible and those where it was prominent.

The results of the first pilot led to the decision to conduct another one. The fourth step in the development of the instrument was to analyze 10 history lessons in the Netherlands in a second pilot. The coders were two experienced teacher trainers with research experience, as this group of teachers is expected to use the instrument more than others in the future. With the exception of the category 'making clear that there are multiple perspectives and interpretations' that showed poor agreement (.27), the ICC ranged from .55 to .86. Using the codes of the first coder to calculate Cronbach's coefficient alpha, the scale with the seven categories reached an internal consistency of .82, which is sufficient.

Altogether, the instrument was able to distinguish between lessons where HTR was promoted to a considerable extent and those where it could hardly be observed. In both pilots it appeared difficult to reach sufficient inter rater reliability for the category 'making clear that there are multiple perspectives or interpretations'. This may be because different perspectives are not necessarily explicitly explained, or because quite some time may pass between the presentation of a first perspective and a second one. In the first pilot, an experienced teacher trainer observed more items than a student teacher, whereas the observations of two experienced teacher trainers in the second pilot were more consistent. Relatively low levels of inter-observer agreement is common in observation instruments (see e.g. Strong et al., 2011), which would be problematic if the purpose were to assess the quality of teaching. However, we do not intend this instrument to be used to evaluate teaching but rather to serve as a tool for those wishing to emphasize HTR in their teaching and who are looking for support. Although more research is needed on the validity and reliability of the instrument to enable more nuanced conclusions and comparison, e.g. of different groups of teachers, these findings were nevertheless promising and may offer various research possibilities. For example, they can be linked to the teaching context, such as requirements of national curricula or the norms and practices in teacher education.

RQ2: To what extent do Icelandic history teachers teach historical thinking and reasoning at the upper secondary level?

The second study focused on history teaching at the upper secondary school level in Iceland. Contrary to most studies in history education that focus on students and how different instructional approaches affect them, this study focused on teacher behaviour. It was a descriptive, observational study where the instrument Teach-HTR was used to investigate if and how historical thinking and reasoning were being taught at that school level. Until now, very little research on history teaching in the country as a whole has been done and most studies use self-reported data. It was therefore of particular value to conduct this study in Iceland where the instrument was used on a larger scale for the first time, while simultaneously beginning the process of mapping out the landscape of history teaching.

The national context is of importance. In Iceland the upper secondary school is highly decentralized. Assessment is organized within each school and no centralized exams take place. The national curriculum guide (2012) makes no specific requirements of history teachers beyond teaching their subject – as well as all other subjects – and basing it on six fundamental pillars of education: literacy, sustainability, democracy and human rights, equality, health and welfare and creativity. Teacher education programmes are rather generic, due to the fact that the handful of student teachers in history education each year belong to a larger group of future teachers of various social subjects. Many teachers provide their own materials by different means. Nothing has been known about pedagogical teaching practices until now, but a recent study on teaching practices in upper secondary schools in general shows a considerable emphasis on teacher-centred strategies and little creative input from students (Sigurgeirsson et al., 2018).

All history teachers in a selection of upper secondary schools were contacted and asked if they would allow filming of their lessons. The participants in this study were those who replied positively: 27 teachers from 12 schools both in the capital and rural areas. This was almost half of all history teachers at the upper secondary level in the country. Five of them were female, which is an almost accurate reflection of the gender balance within the profession. Two lessons of each teacher ($N=54$) were filmed on a small camera and analyzed with the instrument Teach-HTR. The teachers had not seen the instrument and were unaware of what was being observed. When selecting lessons, no regard was given to lesson content or the sequence of lessons. The seven categories of the instrument were coded on a Likert scale from 1 to 4.

Category 1, ‘communicating learning objectives related to the development of students’ HTR ability’, and category 5, ‘providing explicit instructions on HTR strategies’, were only visible in 7% of the lessons. The category with the highest score was category 2 of the instrument, ‘the teacher herself/himself demonstrates HTR without explaining it explicitly or giving instructions on how to do it’. It was observed in 93% of the lessons and scored 2.76 on average. This category includes behaviour such as problematizing and asking historical questions, providing historical context and comparing historical phenomena and periods, all very common in the lessons observed. In 67% of the lessons, the teacher engaged students in individual or group assignments that asked for HTR and the category (no 6) scored 2.44. ‘The teacher using historical sources to support HTR’ (category 3) scored 1.61 and ‘making clear that there are multiple perspectives and interpretations’ (category 4) scored 1.54. They were observed in 43% and 41% of the lessons. Lessons where the score was either particularly high or low were described in more detail.

The results relate to both history teaching in Iceland and the practical use of the observation instrument Teach-HTR. The findings answer our research question by showing that some form of HTR is present in almost all history lessons, although sometimes rather superficially. In many cases, the scores for the categories observed were rather low, meaning that they may have been touched upon but not consciously developed in the lesson. Some categories were hardly observed at all, notably categories 1 and 5. In other words, in the lessons of the Icelandic history teachers the teaching of HTR was only observed to a limited extent, mostly confined to elements that many would expect in regular history lessons, such as the teacher providing context or explaining historical phenomena, whereas HTR was hardly at all discussed or explained explicitly. This may have to do with the fact that no emphasis at all is placed on HTR in either teacher training or curriculum. It is also possible that some topics are better suited to the teaching of HTR than others. While the sample was relatively small it does nevertheless provide clear indications of the situation regarding the teaching of HTR at upper secondary level in Iceland.

RQ3: Which beliefs about goals and strategies of teaching history play a role in teachers' inclinations towards teaching historical thinking and reasoning?

In the third study, we wanted to explore the different ways of teaching HTR and the relationship between teacher beliefs, an accepted influencing factor according to the literature,

and teaching practices. Eight teachers from the group of 27 Icelandic history teachers that participated in the previous study were interviewed, following an analysis of their lessons that showed that they taught HTR to different degrees. The aim was to investigate their teacher beliefs about the nature of history, the goals of history teaching and the way students learn history. We expected their teaching behaviour to reflect variations in their beliefs and wanted to explore if certain beliefs could be linked to the teaching of HTR. Besides knowledge of their subject, teacher beliefs are considered to be one of the most important factors shaping teachers' routines (Pajares, 1992; Voet & De Wever, 2016; Yilmaz, 2008b). The connection between beliefs and behaviour has been established by several studies (c.f. Buehl and Alexander, 2005). Nonetheless, it has also been revealed how problematic it may be for teachers to follow their orientation when it comes to classroom practices (Huijgen et al., 2019; VanSledright & Limón, 2006; Voet & De Wever, 2016; Wansink et al., 2016). This may be due to various reasons, such as the requirements of the curriculum, availability of teaching materials, time allocated to history teaching or the teacher's perception of students' abilities. Different goals of history teachers have been identified, e.g. in the Netherlands (Tuithof, 2017), as well as different strategies (e.g. Nygren, 2009).

This was a qualitative multiple case study where purposive sampling (Palys, 2008) was used to select the eight participants. The analysis of their lessons by the observation instrument Teach-HTR indicated that they taught HTR to a various degree. The teachers came from seven schools and their teaching experience ranged from three to 24 years, the average being 10.6 years. Before the interview, they received the results of the analysis of two of their lessons, based on the observation instrument Teach-HTR, as described in the second study. Furthermore, they received some video fragments of their own lessons that were used to stimulate the discussion. All teachers implied that the two lessons that had been videotaped and analyzed were fairly typical of their teaching. They also answered a brief questionnaire concerning their reasons for becoming a teacher and their participation in professional development. Semi-structured interviews, 45 minutes long on average, were conducted, focusing on the teachers' view of history teaching in general and their personal goals in that respect. In order to gain information on their professional identity they were asked what had shaped their beliefs about history teaching and if those beliefs had changed during their career.

Based on the data from the lessons and the interviews, the teachers were divided into three groups, according to the extent to which they promoted HTR in the observed lessons: to a

large, moderate or little extent. The goals of the two teachers in the first group who taught HTR to a large extent differed from those of the others. They were not concerned with giving an overview over time like all the others, they wanted history to present moral lessons and they emphasized historical reasoning and skills. The third group, which consisted of three teachers, did not actively teach HTR and emphasized the role of history teaching in providing students with a cultural stock-in-trade. Their instructional strategies could be classified as narrative and based on lecturing, whereas the strategies of the teachers in the first group were more student-centred and project based. In other words, a considerable difference in their strategies was visible, as well as in their goals with teaching history. In between were the two teachers in the second group who taught HTR to a moderate extent.

As an answer to the research question, in this study we found that the beliefs of the teachers who placed an emphasis on teaching HTR were strongly linked to their view of the nature of history as interpretational, providing an opportunity to enhance students' critical thinking by giving them open-ended assignments that call for source-based inquiry. Their beliefs also favoured the promotion of skills which they considered more important than giving an historical overview. The results of the study suggest that it is important, both in initial teacher education and in professional development programs, to pay attention to the role of teacher beliefs and the interconnection between those beliefs and teaching practices.

RQ4: How can using the observation instrument Teach-HTR enhance history student teacher's and history teacher's professional growth in the teaching of historical thinking and reasoning?

In our closing study, we wanted to investigate the role the instrument Teach-HTR might play in either initial teacher training or in the professional development of experienced teachers as a tool to enhance professional growth. Since we started developing it, it had been our goal to explore its usability in these fields. We decided to use The Interconnected Model of Professional Growth (Clarke & Hollingsworth, 2002) to discern eventual change to any of the four domains: "the personal domain (teacher knowledge, beliefs and attitudes), the domain of practice (professional experimentation), the domain of consequences (salient outcomes), and the external domain (sources of information, stimulus or support)." (Clarke & Hollingsworth, 2002, p. 950). Just as all these domains may influence each other, the personal domain is also related to a teacher's pedagogical content knowledge (PCK), which is often described as

comprising of five components: orientation towards teaching, knowledge and beliefs about the curriculum, knowledge and beliefs about students' understanding, knowledge and beliefs about assessment and knowledge and beliefs about instructional strategies (Magnusson et al., 1999).

To answer the research question, we conducted two case studies. In the first study, three history teachers in Iceland participated in a professional development program, based on principles investigated in other studies (e.g. Desimone, 2009). These include a strong link to daily practices and the teachers being active learners. Their teaching experience was two, 15 and 32 years. Our point of departure was an analysis by Teach-HTR of two lessons of each teacher. They chose two categories of the instrument to focus on and used it besides relevant reading materials to prepare lessons where they taught the selected elements of HTR. A peer observed the first lesson and discussed it with the teacher. Following the discussion, the teachers modified their lesson plans and repeated the teaching of the HTR element, observed by the researcher. The intervention was concluded with a retrospective interview. The program stretched over ten months, from one school year to another. There were distinct changes in the personal domain of two of the teachers. The participants managed to use the instrument to add to their knowledge and their attitude towards instructional strategies and even their beliefs changed. This became apparent in the domain of practice where they experimented with new or modified strategies and gained their reward by more motivated students (domain of consequences). These teachers indicated that the instrument, as well as the reading materials, served as a source of growth (external domain). The third teacher interpreted HTR in a rather limited way and did not experience personal growth regarding its teaching during the program.

In the second case study, a teacher educator in the Netherlands decided himself how to use the instrument with seven master's students in history teaching. They prepared and taught a lesson, supported by the instrument, and used it when observing a lesson by their peer. Pre- and post-questionnaires were used to gain knowledge of the students' ideas about HTR and their perception of their ability to teach it (task value and self-efficacy; Pintrich et al., 1991). The intervention lasted three months and the student teachers received coaching from their course teacher. Based on the pre- and post-measurements and the lesson observed by a peer, it is possible to discern a slight change in the personal domain, whereas the value they associated with teaching HTR stayed the same, having been quite prominent from the beginning. Their lesson plans and observation of their lessons showed that all but one were

able to include HTR in their lessons, most often engaging students in assignments that require HTR (category 6 of the instrument) or the students themselves demonstrating HTR (category 2). It turned out that one student became less confident of his ability to teach HTR after the intervention. In a group discussion with their course teacher, as well as in the post-questionnaire, the students expressed their positive views of the usefulness of the instrument, enhancing both their understanding of HTR and providing guidelines of how it could be taught. Nevertheless, some of them called for more examples of teacher behaviour.

The instrument added to the professional growth of participants in both studies. It stimulated change in the personal domain and contributed to their knowledge, beliefs and attitudes towards teaching HTR. This was linked to change in the domain of practice where new assignments were designed, discussions conducted with HTR in mind, learning processes explicitly explained and more. The domain of consequences (salient outcomes) was beyond the scope of the study, however the teachers reported an increased motivation of their students and more challenging assignments. Thus, the observation instrument Teach-HTR seems promising to serve as a source or stimulant of professional growth at various stages in a history teacher's career.

3. Conclusion and discussion

There is a considerable amount of literature on historical thinking and reasoning, what it entails and why it should be taught in schools (c.f. Luis & Rapanta, 2020). Its theoretical foundation has been laid, consisting of various aspects and approaches which share a common emphasis of understanding how historical knowledge is constructed from fragments of historical evidence. Some of the literature even considers how HTR can be taught, but for many teachers it is profoundly difficult to translate theory into practice (e.g. Reisman, 2012; VanSledright & Limón, 2006; Voet & De Wever, 2016; Wansink et al., 2016). Building upon this rich foundation, we wanted to address this point and to shed further light on what teachers can do to include the teaching of HTR in their work, in other words to operationalize the teaching of HTR into observable teacher behaviour. What follows is a summary of what we have learned regarding the instrument itself, the relations between teacher beliefs and the teaching of HTR, the teaching of HTR in Iceland and the use of the instrument Teach-HTR in professional development and initial teacher training, i.e. its implications for practice.

3.1 The observation instrument Teach-HTR

The observation instrument Teach-HTR complements the extant literature on historical thinking by bringing together insights and knowledge that is rather fragmented and not easily accessible to teachers. There are several studies on teaching historical thinking strategies, such as reading like a historian (Wineburg et al., 2013), contextualizing (Huijgen et al., 2019) and causal reasoning (Stoel et al., 2015). The instrument combines many of these, being strongly connected to the existing body of scientific knowledge about components or aspects of historical thinking and recommendations for pedagogies to develop students' HTR. By bringing these together in one instrument and operationalizing many of the issues that have been under discussion in the last two or three decades, it provides an entrance for teachers and student teachers to the literature on HTR components (e.g. *The Big Six Historical Thinking Concepts* by Seixas and Morton (2013) or the three types of reasoning as discerned by Van Boxtel and Van Drie (2018)). This makes the use of observation results useful for professionalization where teachers can be provided with the literature relevant to the particular category of the instrument they choose to focus on, as we did in our last study. A literature list could even be regularly updated and included in the instrument. Such an update would strengthen the link to current research at any given time. Since the original design of Teach-HTR, researchers have elaborated upon the ethical dimension of HTR (c.f. Milligan et al., 2018; Seixas & Morton, 2013), which is not included in it. Examples of ethical arguments might easily be added to the indicators relating to categories that are already there, such as how to formulate arguments (Category 5, the teacher provides explicit instructions on HTR strategies) or Category 6, engaging students in activities that ask for HTR. Some scholars find the teaching of HTR important because it enhances disciplinary thinking. Others call for a connection with broader aims, such as citizenship (c.f. Barton & Levstik, 2004; Thorp & Persson, 2020; Van Straaten et al., 2015). These issues would be interesting to explore further and connect the relevant literature to the instrument, particularly because some of the Icelandic teachers in our study clearly connected the teaching of HTR with e.g. critical thinking skills and other aims that are related to citizenship education. Since they were not very familiar with the literature on HTR, it was intriguing to see that they made this connection nevertheless.

The instrument has undergone development from the initial stages of the first study until the final stages of the fourth one. We began with a literature review, acquired expert opinion of geographical variety and did two pilots before we used it to analyze a considerable amount of history lessons. Nevertheless, the employment of the instrument in the final study by our two target groups, student teachers and experienced teachers, brought new insights and ideas for further development. We address these issues and others that came up during the process of the whole set of studies.

The first one refers to student learning of HTR. Initially, we set off from the point of focusing on teacher behaviour and what a teacher does to enhance a student's understanding of HTR. Even though two categories of the seven that comprise the instrument include students, either doing assignments that require HTR or participating in a whole class discussion that calls for it, the focus continues to stay on how the teacher manages these lesson components. They do not cover the extent to which students are really engaged in HTR or the quality of it. In practice, teachers tend to view their actions in the classroom in relation to student learning. It is therefore not surprising that many of those who have seen or used the instrument suggest more emphasis on the receiving end, i.e. how students learn HTR. It would further strengthen the connection to the literature on HTR if it was considered from the two angles of teaching and learning. However, as a matter of course, an observation instrument has to be relatively short and precise. Bringing students more into it calls for a different approach, such as specific rounds of observations (c.f. CLASS). We are not aware of instruments that gauge student learning while simultaneously observing teacher behaviour. While it would be an interesting project to design an instrument directed at student learning, we consider the focus on teacher behaviour to be a strong side of Teach-HTR.

Second, the number of lessons observed is bound to play a role. In the articles, questions are raised, e.g. concerning the varying suitability of topics for the teaching of HTR. A larger sample of lessons would most lightly have shown if this were the case, indicating which topics offer opportunities for HTR and the eventual reasons for that.

Third, it is indisputable that careful training is necessary if more than one observer is going to use the instrument to compare the teaching of different individuals or groups of teachers. The same applies if the intention is to link it to student outcomes or teacher characteristics, such as education, years of experience, beliefs about history etc. Even though each category of the instrument is grounded in the literature, observers' ideas of what they are looking for may

differ. This was salient in our second study, where observers, both in Iceland and in the Netherlands, struggled with the category of the teacher demonstrating multi-perspectivity. It is a difficult construct to define and operationalize and we can look into more recent literature to seek assistance. It has recently been discussed in more depth, e.g. by Kropman et al. (2018) and Wansink et al. (2018). When looking for multi-perspectivity, brief examples of teacher behaviour are not applicable. Observers need to contemplate the whole context of a lesson to be able to discern it. Perhaps this issue might be addressed more explicitly when training observers for the use of Teach-HTR.

The fourth point is related to the previous one. The group of experts that reviewed the first drafts of Teach-HTR highlighted the difference between the teacher bringing in multiple perspectives and different interpretations. The latter is included in one sub-item of category 4, ‘the teacher makes clear that there are multiple perspectives and interpretations.’ Nevertheless, as the backbone of historical research, the role of interpretations deserves more attention. A clearer distinction between multi-perspectivity and interpretations might help observers to identify either or both.

Fifth, the experts also requested more examples which were subsequently included in the design of the instrument. Practical experience emphasizes the importance of a larger number of clear and descriptive examples that further facilitate the use of the instrument.

Sixth, deeper insight is needed into the extent to which the instrument is applicable in different national contexts. The results of our studies in two countries are quite promising, despite circumstances of history teaching being very different when it comes to national curricula, teacher education, teaching materials and evaluation. However, more examples of the instrument’s use in different contexts are necessary. This includes contexts where history is not taught as an independent subject but integrated in social studies, as well as when students work on projects or use inquiry-based approaches.

These are some of the considerations we did not look into because they were beyond the scope of our studies. Altogether, the use of the instrument Teach-HTR adds details and nuances to what has already been established regarding the teaching of HTR. The instrument demonstrates the difference between lessons where it is prominent and where it is not, it highlights if and to what extent HTR is being taught and how it can be enhanced and offers various research possibilities. It can be used to get an idea of the teaching of HTR in a particular country, age group or by a particular group of teachers, and as an instrument for

teacher education and professionalization. On the other hand, it cannot be used to assess the teaching of individual teachers since the characteristics of a good teacher are far too complicated to be within the realm of an observation instrument.

3.2 Teacher beliefs and the teaching of historical thinking and reasoning

The dynamics of teachers' beliefs have already been mapped out, as well as their relevance when it comes to teacher behaviour and routines (Buehl and Alexander, 2005; Pajares, 1992). Our studies confirm the role of teacher beliefs, e.g. when teachers contemplate the nature of history or why it should be taught (McCrum, 2013). We mainly focused on teacher beliefs regarding how to teach history to find out if particular beliefs played a role in teachers' inclinations towards teaching HTR. Our third study, where we investigated the relation between teacher beliefs and the teaching of HTR, suggested a relationship between student-centred teaching approaches that included open-ended and inquiry-based assignments and views of history as a construct that required HTR skills. It is important to note that teacher beliefs can change as indicated by our fourth and last study on professionalization, where teachers gained new insights into their students' ability to engage in HTR when they changed their teaching approaches. This revelation may be strongly linked to the Icelandic context where teachers are not used to framing their teaching within the bounds of HTR, but reason more e.g. from the point of critical thinking and citizenship. They may even be unaware that they are teaching HTR. The connection between a disciplinary activity (teaching HTR) and broader objectives (enhancing critical thinking and citizenship) offers interesting possibilities for further research on the goals of history teachers (Thorp & Persson, 2020; Van Straaten et al., 2015; McGrew et al., 2018).

However, certain limitations must be acknowledged. The third and fourth studies were on a small scale and despite giving strong indications of the connection between particular teacher beliefs and the teaching of HTR, both at early and later stages in a history teacher's professional life, generalizations must be made very carefully. Other studies have drawn attention to the discrepancy between teacher beliefs and what they do in the classroom (c.f. Huijgen et al., 2019; VanSledright & Limón, 2006; Voet & De Wever, 2016; Wansink et al., 2016), so inferences need to be carefully supported.

3.3 The teaching of historical thinking and reasoning in Iceland

This dissertation includes the first indications of classroom practices in history lessons at upper secondary school level in Iceland. Previously, the development of the discipline had been documented (Friðjónsson, 2013), as well as classroom practices in upper secondary schools in general (Sigurgeirsson et al., 2018), but the lens has never been focused on history lessons in particular before. Studying history lessons in Iceland highlighted the importance of national context when investigating teaching practices. Neither the national curriculum guide nor the initial education of history teachers pays attention to HTR. It is therefore interesting to see how teachers approach it, if they do so at all. Questions related to the connection between curriculum guides and teaching practices are relevant for history education in other countries (in Sweden, see e.g. Samuelsson & Wendell, 2016). Our studies show that the teaching of HTR is present in one form or another in almost all history lessons at upper secondary level, often in close connection to the teaching of critical thinking. However, it is limited and some elements of it were hardly visible. Teachers differ considerably in their approaches: some demonstrate HTR, others engage students in HTR activities and our last study showed that some teachers struggle considerably with it. Since teacher education is organized across school subjects and there is little space for disciplinary approach, attention should be paid to HTR at earlier stages, i.e. in history courses leading to a bachelor's degree. Teach-HTR could support the first steps towards operationalizing HTR processes that are already familiar to everybody with a background in history education. Attempts of this nature should be relevant for teacher educators in other countries where students are a part of a larger group and there is limited scope for subject specific pedagogy. It would also be interesting to investigate history lessons at lower secondary level to discern if the situation is similar or different where the teachers have a different educational background from those teaching in upper secondary schools. Research conclusions could provide guidance for both initial teacher education and continuous professional development.

3.4 The use of Teach-HTR in professionalization and teacher education in history: implications for practice

In our studies, we used the observation instrument in various ways. It was used to analyze lessons and describe teacher behaviour, it shed a light on the connection between teacher beliefs and teaching practices related to HTR and it was used in both professional development and teacher training. We wish to emphasize the necessity of understanding HTR to be able to teach it, made very salient in our last study on professionalization. The instrument Teach-HTR should not be considered a toolbox for teachers or student teachers who lack prior knowledge on HTR, as we saw in the case of the Icelandic teacher in our fourth study who misunderstood the concept and did not experience personal growth. Rather it has to be used in connection with selected literature on various elements of HTR, depending on the choice of individual teachers. Thus, it can serve as a framework for reflection, especially a mutual one where peers discuss their teaching in a learning community.

The aforementioned national context plays an especially vital role when it comes to initial training, practices and professionalization of history teachers. It has to be underlined that whether or not to teach HTR is not solely based on a teacher's choice or personal inclinations. Several factors may encourage or restrain such efforts, i.e. the curriculum or a teacher's access to relevant materials and support. According to our studies, Teach-HTR can provide materials and support, especially if accompanied by a regularly updated list of reading materials. Other issues need to be addressed as well, such as whether assignments given by the teacher are appropriate for the student group in question. This is not taken into account in the instrument and could be a part of including more varied ways of teaching. Again, the time factor is a limitation. If the last study had stretched over a longer period of time, it would have given insights into eventual long-term effects of both the intervention the student teachers participated in and the professional development program. This calls for further investigation in a long-term research. The small number of participants in both cases may inhibit generalizations, as do the limited ways we used to measure professional growth. It was problematic to define why no professional growth was visible in one of the teachers in our study. It is possible that in order to profit from an intervention that develops higher order skills, such as HTR, she needed to hold the view of history that it has more to offer than an accumulation of knowledge. The absence of such a view may be considered a hindrance of professional growth in this context. Similar conclusions have been reached in other studies

(e.g. Reisman & Enumah, 2020). To further investigate this, researchers should also carefully map out teacher beliefs about the nature and construction of historical knowledge.

The articles depict how teachers teach HTR. This is of significance for teacher education and the development of professionalization. The instrument has several implications for teacher educators and student teachers. Teacher educators can integrate it in assignments in their courses for multiple purposes, following or combined with theoretical discussion of HTR. Student teachers can be required to use it to observe the lessons of either experienced teachers or their peers, looking for indications of HTR, and to discuss HTR with peers, mentors or course teachers. More importantly, it can be used when student teachers prepare lessons where they concentrate on a particular element of HTR since it provides them with examples of actual practice that may easily be linked to theory. The categories and items of the instrument may serve as reminders of how to integrate HTR in their teaching, by explaining it in the lesson goals, teaching it explicitly etc. It might be recommended that teachers focus on particular categories or indicators and so avoid the impossible task of having to address all the elements of the instrument in one lesson.

The implications for experienced teachers are also varied. If they wish to enhance their teaching of HTR, teachers can use it to investigate and/or modify their own practices. This can happen by various means: they may start by using the instrument as a self-report to reflect upon the teaching practices they consider themselves to follow; they can analyze video recordings of their lessons or collaborate with a peer, doing mutual observations and reflecting on their lessons together. As a collaborative activity within one school, this could be quite advantageous. It enables teachers to identify their strengths, as well as their weaknesses, and discover where there is room for improvement. The instrument can also be the linchpin in a professional development program, as a resource of ideas and ways to teach HTR. As such, it can support the professional growth of both student teachers and experienced teachers.

4. Final words

During the course of writing this dissertation, images from hundreds of lessons I have visited and observed through the years have regularly come to mind. It is my conviction that it is a privilege to be a history teacher, to have the opportunity to welcome young people to a rich

and prismatic world they may enjoy in various forms for the rest of their lives. This can certainly be achieved by different means and approaches, one of which has been investigated here. Paying attention to the teaching of historical thinking and reasoning is a rewarding task for any history teacher who wishes to ignite that spark. Hopefully, our studies and the observation instrument Teach-HTR can support such endeavours.