

## Inclusive Education in the Netherlands: Developments through Time and an Example in Primary History Education

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### ABSTRACT

All children deserve the best possible education. It is a universal principle that has led to the design of different educational practices in different countries. This review paper focusses on how inclusive education in the Netherlands has developed and describes an example from inclusive history education. Developing pupils' understanding of historical time requires thoughtful instruction linked to objectives, efficient use of timeline, effective planning and regular assessment through all years of primary school. *Timewise* makes this possible with a complete set of educational materials, thereby serving as an example of an inclusive learning environment, which helps all pupils develop their understanding of historical time.

### Article Info

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## Hollanda'da Kapsayıcı Eğitim: Zaman İçindeki Gelişmeler ve İlköğretim Tarih Eğitiminde Bir Örnek

### ÖZ

Bütün çocuklar mümkün olan en iyi eğitimi hak ederler. Bu evrensel bir ilkedir ve çeşitli ülkelerde farklı eğitim uygulamalarının tasarlanmasına yol açmıştır. Bu makale, Hollanda'da kapsayıcı eğitimin nasıl geliştiğine odaklanmakta ve kapsayıcı tarih eğitiminden bir örneği ele almaktadır. Öğrencilerin tarihsel zaman anlayışının geliştirilmesi, ilkokul yıllarının tamamı boyunca düzenli değerlendirmeyi, etkili bir kronolojik düşünme becerisinin oluşturulmasını, iyi bir planlamayı ve hedeflerle bağlantılı bir öğretimi gerektirir. *Timewise*, bunu eksiksiz bir eğitim materyali seti ile mümkün kılar ve böylece tüm öğrencilerin tarihsel zaman anlayışı geliştirmelerine yardımcı olan kapsayıcı bir öğrenme ortamı örneği olabilir.

### Makale Bilgileri

#### Anahtar kelimeler:

Kapsayıcı eğitim,  
Hollanda eğitim sistemi,  
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### Introduction

All children deserve the best possible education. This is a universal principle which has led to designing different educational practices in various countries. This article focusses on how inclusive education in the Netherlands developed and describes an example of inclusive history education. The article starts with contextual information about the Dutch education system and an overview of how special education in the Netherlands developed to the current practice of inclusive education, with a focus on primary education. Subsequently an example for history education will be elaborated, focussing on how primary school pupils can be guided in their development in the understanding of historical time.

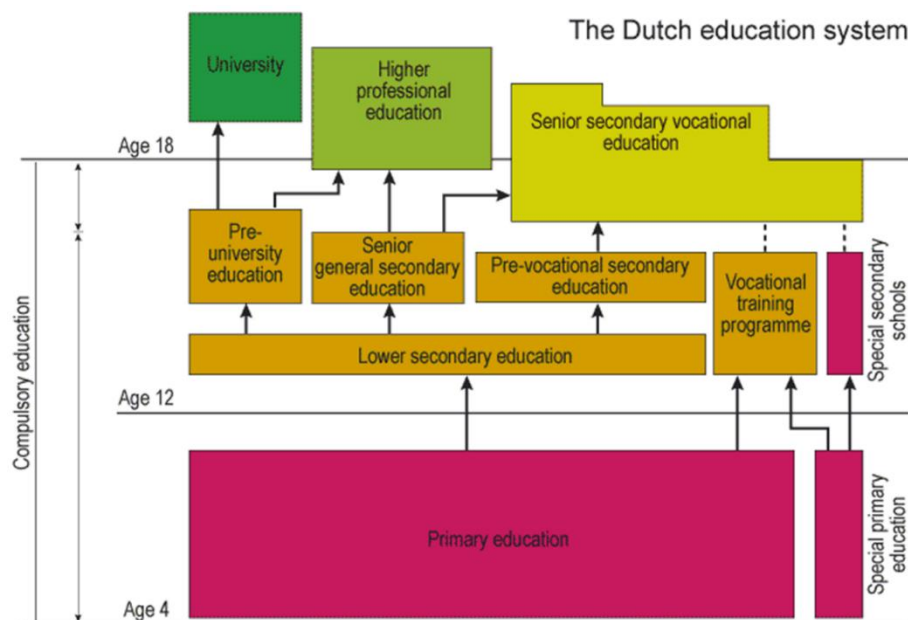
### The Dutch education system

In the Netherlands compulsory education starts at the age of five, although in practice, most children (98%) start in primary education when they are four years old. For children under the age of four there are various childcare facilities available, such as play grades, pre-schools and day nurseries. These facilities are often part of primary schools that ever more develop into Child Centres, where day-care and education are integrated.

Primary education in the Netherlands comprises general primary education, special primary education and (secondary) special education. Primary education consists of eight grades and is targeted for pupils aged four to twelve. There are almost 7,000 primary schools for about 1,500,000 pupils (CBS, 2009). This schooling is followed by 4, 5 or 6 years of secondary education, depending on the type of school:

- preparatory vocational secondary education (vmbo) (4 years);
- senior general secondary education (havo) (5 years);
- university preparatory education (vwo) (6 years).

After secondary school pupils can proceed to senior or higher vocational education or to university. From the age of sixteen there is a partial compulsory education, which means that pupils must attend some form of education for at least two days a week. Compulsory education ends for pupils aged eighteen and up or when they have received a diploma on the level of vwo, havo or mbo (senior secondary vocational education). Figure 1 provides an overview of the Dutch education system.



**Figure 1.** Overview of the Dutch education system (Source: Cito, The Netherlands).

There are both public and denominational institutions at all levels of the education system. About one third of all children visit public schools and two thirds attend denominational schools. Most denominational schools are Roman Catholic or Protestant, however there also are Jewish,

Islamic, Hindu and humanistic schools, and schools based on the philosophy of Rudolf Steiner. Finally there is a small number of private schools, without finance from the government.

For pupils who require specialized care and support, there is special (primary) education and secondary special education.

### *Special education in the Netherlands, changes over time*

In the Netherlands, the first schools for children with special educational needs were schools for hearing-impaired and blind children. In 1790 a school for deaf-mute children, which today still exists, was founded in Groningen and in 1808 the first institute for blind children was founded in Huizen (Stilma, 2011). In the 19th century there were ever more initiatives for special education for children with a physical or mental disability.

In the educational law of 1920, special education received a legal status and more schools for special education were founded, also intended for children with modest and severe learning difficulties. In the twentieth century, the expanding range of schools for special education caused an explosive growth in numbers of pupils. In 1938, all special schools together had 13,000 pupils, 50,000 in 1950 and no fewer than 106,000 in 1986 ([www.canonsociaalwerk.nl](http://www.canonsociaalwerk.nl)). Particularly the number of pupils at LOM schools (for children with learning and pedagogical difficulties) grew rapidly. These schools served as a repository for children with whom regular schools did not know what to do, but who did not belong to any of the other forms of special education.

In the 1970's the enormous growth of special education raised the question whether Dutch education functioned well, if it placed so many children outside. More attention was also paid to whether and to what extent the stamp "extraordinary child" had a stigmatizing effect and if it was sensible for the development of children to isolate them in special schools. The government also questioned the explosive growth of special education, particularly from the viewpoint of the costs; special education schools were much more expensive than regular primary schools. Under the influence of these two tendencies, a movement became visible towards a greater integration of regular and special education. In the 1980's, this led to the establishment of the 'Going to School Together' policy for primary education [Weer Samen naar School; in Dutch]. The main view in this policy was that pupils with special educational needs should be educated together with their peers in mainstream schools whenever possible.

As a result of this policy, schools were organized in partnerships consisting of regular primary schools and at least one school for special primary education. These schools received government funding, from which ambulatory counsellors could be paid, to realize 'adaptive education' in a differentiated curriculum with socio-emotional support. The money could also be spent on extra care by an internal supervisor or remedial teacher.

Evaluation of the 'Going Together to School' policy in 2003 (OCW, 2004) showed that the number of pupils in special education had indeed declined, however for the educational results there was a less rosy picture. At school level and in the classroom, the conditions for adaptive education appeared far from fulfilled. For example, only 35% of teachers attuned education well to the differences between students (Meijer, 2004).

In 2004 special education was reorganized: four grades of schools were created, called cluster schools.

- Cluster 1: for pupils who are blind or visually impaired (nationwide)
- Cluster 2: for pupils who are deaf or hard of hearing, or who have severe speech-language difficulties (nationwide)
- Cluster 3: for pupils with an intellectual disability, a physical disability or a chronic illness (regional)
- Cluster 4: for pupils with behavioural, developmental or psychiatric problems (regional)

Parents should have a choice: if they wanted their child at the regular neighbourhood primary school, everything should be done to make this possible. Parents got the option, after a referral for a cluster school, to have their child go to a nearby school with a government-issued funding, also known as a 'backpack'. With the 'backpack policy', pupils that met certain criteria received a so-called pupil-bound budget. This budget allowed for payment of additional assistance to be offered by the chosen primary school.

### *Inclusive education in the Netherlands*

In an attempt to make the Dutch educational system more inclusive, a new Education

Act for Pupils with Special Needs was introduced in 2014, called 'Suitable and inclusive Education [*Passend Onderwijs*; in Dutch]. The major principle of this act is that all children deserve the best possible place in education: education that challenges pupils, based on their capabilities and taking into account their disabilities. If possible, all children should follow regular education to be well prepared for further education and a place in society. Special education would continue to exist for children who are best placed there. According to this act schools should have a *duty of care*. This means that not the parents, but the school must find a suitable place for children who need extra support. The school has to search for a suitable place in consultation with the parents; at their own school or, if the school cannot provide the correct guidance, at another regular or special school.

With the introduction of suitable and inclusive education, the government wanted to achieve that:

- all children receive an appropriate place in education;
- in principle, a child goes to a regular school and, if that is not possible, to special education;
- schools are given more options for customized support;
- the possibilities and educational needs of the child are decisive, not the limitations;
- children no longer sit at home for a long time.

Since 2015, the introduction and development of inclusive education has been researched by Evaluation Inclusive Education. An interim report (Ledoux & Wallander, 2019) shows that the number of pupils in special primary education diminished between 2014 and 2016, where after it has been slightly rising again. Although it could not be determined whether students receive adequate support, most schools feel that they are successful - at least - in providing basic support. In primary education, the use of "extra hands in the classroom" has increased. Support is available

for teachers, both within their own school and externally and teachers feel generally well supported from their own school. However, teachers experience more stress than before when teaching students with extra support needs.

In a survey of the General Teachers' Association (2019), teachers expressed their concerns. With the current shortage of teachers it becomes ever more difficult to maintain "extra hands in the classroom". According to about 75 percent of teachers, the threshold for referral to special education is too high, because of the higher costs for special education. Since teachers spend a lot of time offering extra support, they experience that there is not enough time for the other pupils, which could affect children who stay behind.

A study of Meijer (2004) shows that pupils who stay behind, benefit from placement in heterogeneous groups and from more time and a structured approach. Furthermore, not only pupils with special needs but all types of pupils benefit from an inclusive learning environment (Van der Bij, 2017).

The second part of this chapter will focus on the development of a structured teaching approach for history education which supports all pupils in their development of understanding historical time.

### *An example of primary history education*

For primary school history education, knowledge of and insight into time are important aspects, which contribute to pupils' historical consciousness. In order to properly guide pupils in their development, it is important to have insight into how they think about time, how their understanding historical time develops and which pedagogies are effective for teaching the understanding of historical time to pupils with different abilities.

#### *1. The understanding of historical time: a definition for education*

Understanding the concept of time is more complicated than it may seem at first glance. This has already been described by Augustine (354-430): "What is the time? If no one asks me, I know; but if I want to explain it to someone who asks, I don't know". The concept of time is complex because it encompasses several dimensions. On the one hand there is the objective understanding of metric time (clock and calendar time) and on the other the subjective understanding of experienced time (tempo, duration, intensity). These two forms of the understanding of time converge in the understanding of historical time, in which time takes shape in stories that give coherence to separate events in the past (Grever, 2009).

An often used an educational definition of the understanding of historical time was developed by Stow and Haydn (2000, p. 87) who pointed to three important aspects for primary history education:

- understanding of the terminology of time indications;
- applying a schedule for time division;
- knowledge of the characteristics of periods and the ability to put these periods in the right order.

In addition to understanding chronology and features of time periods as a basis for understanding the past, it is also important that students can visualize the lives of people in different historical eras,

which can be defined as a "sense of period" (Dawson, 2004, 2009) and that they can make comparisons between historical eras and the present with regard to change and continuity (Wilschut, 2012).

Based on these insights De Groot-Reuvekamp (2017) operationalized the understanding of historical time from an educational perspective in five objectives for primary school pupils:

1. use the vocabulary of time;
2. sequence pictures of objects, situations, events and persons in chronological order;
3. use the timeline;
4. identify characteristics of historical era;
5. compare eras with each other and with the present.

## ***2. Pupils' development in the understanding of historical time***

Until well into the twentieth century, researchers assumed that learning about historical time is only possible after children master the concepts of clock and calendar time. For example, they would not be able to learn about history until they know the days of the week and the months of the year. Researchers concluded that children were only able to develop a full understanding of historical time from about age 11. This was in line with Piaget's theory that described that children go through a number of phases in their development of understanding time, in which maturation plays an important role. Although Piaget's research did not relate to the historical notion of time, his phase theory has long influenced studies on the development of understanding historical time.

From the 1970s and 80s of the twentieth century, English and American researchers - independently of each other - have conducted specific research into the development of the understanding of historical time (Blyth, 1978; West, 1981; Harnett, 1993; Barton & Levstik, 1996; Hoodless, 2002; Hoge & Foster 2002; Hodkinson, 2003). One example is the study by Barton and Levstik, who presented nine images from everyday life in the United States to students ages 5 to 12. Almost all pupils were able to correctly arrange these images in chronological order. They were able to distinguish changes over time based on material visible factors, such as transport, clothing and architecture. This study and similar studies show that pupils from the age of 5 can already develop a basic understanding of historical time and that their development can be stimulated by education. English schools are in line with these findings, with a start of history education in year 1, for pupils aged 5 years. In the Netherlands, on the other hand, history education in most schools only starts when pupils are about 9 years old.

### ***a. History education in Dutch primary schools***

In the Netherlands there is no 'state curriculum'; attainment aims are fixed through core objectives (Table 1), that should be reached by the end of primary school, for state, as well as private schools. These leave a considerable amount of freedom to the individual school and the individual teacher in their choice of pedagogy and of content.

Since 2006, the Dutch curriculum for history contains a framework of ten eras that are mostly taught chronologically, with associative names like the era of Discoverers and Reformers (1500-1600) and Citizens and Steam engines (1800-18900). For each era several characteristic features are described. In 2007 the "Canon of Dutch History and Culture" was added: an overview of "what everyone ought to know, at the very least, about the history and culture of the Netherlands" (Van Oostrom, 2007). The canon is a chart with a series of 50 'windows', arranged chronologically on a time line (e.g. William of Orange, Rembrandt, Slavery and Anne Frank), that may function as 'windows' on significant topics related to national history. (See Canonvannederland.nl)

For history the majority of teachers used to follow textbooks, starting from grade 5 or 6 (ages 8/9). However, recently ever more schools integrate history with geography and science in a thematic approach, named world orientation (Béneker et al., 2020).

Pupils should learn:

1. to use simple historical sources and **the vocabulary of time and periods of time**;
2. about the characteristic aspects of the of the following **eras**: hunters and farmers; Greeks and Romans; monks and knights; cities and states; discoverers and reformers; regents and princes; wigs and revolutions; citizens and steam engines; the world wars and the holocaust; television and computer, with the **canon** as basis for illustration;
3. about the important historical persons and events from Dutch history and connect these with examples from world history.

**Table 1.** Core objectives for history in the Dutch primary curriculum.

Evaluations of the Dutch Centre for Assessments (Wagenaar, Van der Schoot, & Hemker, 2010) show that too few pupils in grade 8, at the end of primary school, reach a sufficient understanding of historical time. This was confirmed by the study of De Groot-Reuvekamp, Van Boxtel, Ros and Harnett (2014), in which they compared the Dutch and the English curricula for primary history. They found that the implemented curricula do not fully cover the objectives on the understanding of historical time: for example in our sample, only a quarter of the English teachers paid attention to the chronological order of historical periods consistently and the majority of teachers in both countries did not use timelines. Furthermore, only a small proportion of schools monitor pupils' development of the understanding of historical time.

#### *b. Objectives and stages in the understanding of historical time*

Based on literature and descriptions in curricula for history in England and the Netherlands, De Groot-Reuvekamp, Ros, Van Boxtel and Oort (2017) have developed a model with three stages of development: emergent, initial and continuing understanding of historical time. The model shows pupils' development in increasing difficulty and abstraction, described for the five aims on the understanding of historical time. For example, the application of time indications is evolving from relative indications, such as "long ago", to names of periods, centuries and years. Recognizing features of epochs evolves from concrete features, such as clothing or transport, to more abstract economic and political features, such as the industrial revolution or the Cold War (see Table 2). The model does not contain ages, because pupils can develop differently. The objectives are taken from the operationalization in paragraph 5.1.

Objectives	Stage A – Emergent understanding	Stage B – Initial understanding	Stage C – Continued understanding
<p><b>1. Vocabulary</b></p> <p>Apply the vocabulary relating to time and periods of time.</p>	<p>Apply relative terms relating to time, like: most long ago – a very long time ago – a long time ago – not so long ago – now.</p>	<p>Apply the names of historical eras that are most recent and most long ago and terms like the Eras of: <i>Television and Computer, the World Wars, Steam engines, Roman times</i> and <i>Middle Ages</i>.</p> <p>Recognize dates AD.</p>	<p>Apply the names of the historical eras/periods and terms like <i>Prehistory, Middle Ages</i> and <i>Golden Age</i>.</p> <p>Apply dates AD and BC and the relation between dates and centuries.</p>
<p><b>2. Sequence</b></p> <p>Sequence historical periods and objects, situations, events and people of different periods of time in chronological order.</p>	<p>Sequence pictures of objects and situations concerning everyday life, like lifestyle, clothing, architecture and transport.</p>	<p>Sequence some historical periods (objective 1) and pictures of well-known people and tangible events, e.g. inventions.</p>	<p>Sequence, events, people and historical periods</p>
<p><b>3. Timeline</b></p> <p>Place objects, situations, events and people on a timeline.</p>	<p>Use a simple timeline that portrays the course of time from (very) long ago until now.</p>	<p>Use a timeline with names of historical era’s (objective 1).</p>	<p>Use a timeline with dates AD and BC.</p>
<p><b>4. Characteristic Features</b></p> <p>Use /Identify characteristic features in texts and images to place objects, situations, events and people in the correct periods of time.</p>	<p>Use /identify everyday life characteristic features of past periods (lifestyle, clothing, architecture and transport).</p>	<p>Use /identify social and cultural characteristic features of some historical eras (objective 1).</p>	<p>Identify social, cultural, economic and political characteristic features of the ten historical eras in national, European and World history.</p>



<p><b>5. Compare and contrast</b></p> <p>Compare and contrast different historical periods to identify changes, differences and similarities in the way people lived within and across periods.</p>	<p>Identify differences in everyday life of people in the past and the present in tangible examples through history and related to generations of parents and grandparents.</p>	<p>Identify changes, differences and similarities in the way people lived <i>across</i> historical periods.</p>	<p>Identify changes, differences and similarities in the way people lived <i>within and across</i> historical periods.</p>
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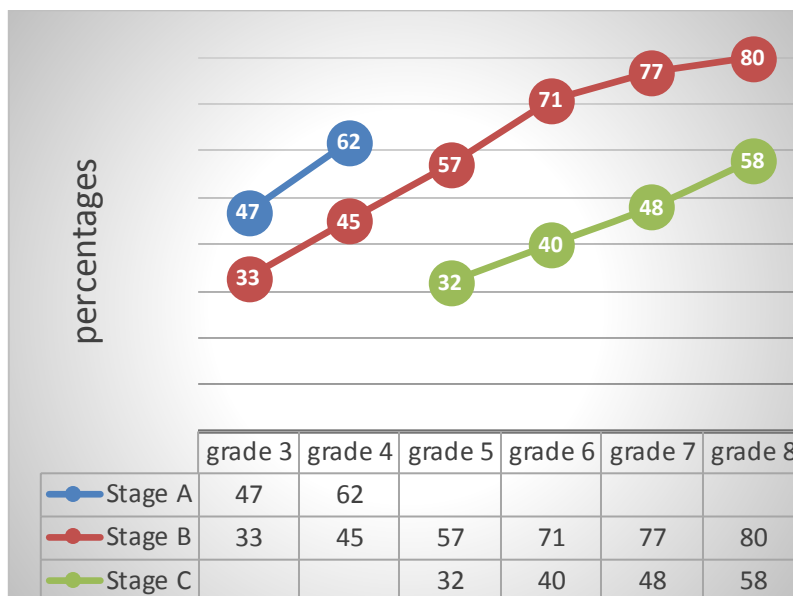
**Table 2.** Developmental model for pupils' understanding of historical time (De Groot-Reuvekamp, Ros, Van Boxtel, & Oort, 2017.)

Based on the model in Table 2, De Groot-Reuvekamp et al. (2017) developed a measuring tool with multiple choice questions at each stage, to investigate the performance of pupils aged 6 to 12. After a consultation with test experts, thinking-aloud interviews with pupils and a pilot with the instrument in a primary school, the test was taken by 1,457 pupils from grade 3 to 8 of seven Dutch primary schools. The data analysis showed that the percentage of correct answers per year rose and that pupils in higher grades performed significantly better than pupils in lower grades (Figure 2).

There appeared to be room for improvement in all grades, especially in grades 3 to 5 (ages 6-9), where pupils hardly received any history education. However, also in grades 7 and 8 (ages 10-12), pupils could still grow in the continued understanding of historical time with regard to understanding the concept of century, placing events on the timeline and comparing historical phenomena within and between historical eras.

*c. Problems that occur when pupils place historical phenomena in time*

To gain more insight into what pupils find difficult when placing events in time, interviews were conducted with pupils from grades 3 to 8 (De Groot-Reuvekamp, Ros, & Van Boxtel, 2019). These pupils were asked to answer thinking aloud questions, based on the objectives of the understanding of historical time in the model in Table 2. For example, they had to arrange images in chronological order and place them on a timeline. As previously shown in English and American studies, both the youngest and older students had little difficulty with the chronological order of the images. However, placing them in time appeared to be more difficult. The answers showed that pupils struggled with a number of names from the ten eras, such as "monks," "citizens" and "regents".



**Figure 2.** Percentages of correct answers for stages a, B and C (De Groot-Reuvekamp et al. 2017.)

Objectives	Problems	Explanation
Vocabulary of time	Relative time phrases	Long ago is 10 or 1000 years ago.
	Meaning of dates	<ul style="list-style-type: none"> <li>The lowest date is most recent.</li> <li>Pronunciation of dates is difficult.</li> <li>Confuse dates AC and BC.</li> </ul>
	Meaning of centuries	1952 is the 19 <sup>th</sup> century.
	Meaning of names of eras	Difficulties with the names of the Dutch ten-era – framework ('regents', 'citizens').
Characteristic features	Lack of knowledge about curricular characteristic features	<ul style="list-style-type: none"> <li>Reason with names or icons of eras.</li> <li>Mix-up characteristics of different eras.</li> <li>Economic en political characteristics seem to be more difficult than social en cultural characteristics.</li> </ul>
Timeline	Lack of knowledge about the position of historical eras on the timeline	<ul style="list-style-type: none"> <li>Guesses for the correct place of eras on the timeline</li> <li>Guesses for the dates that belong to an era.</li> <li>Reason from what would be wrong and then select the era which is left over.</li> </ul>
Compare and contrast	Presentism: progress is assumed in: <ul style="list-style-type: none"> <li>people's intelligence and use of materials</li> <li>appearance of objects / devices</li> </ul>	<ul style="list-style-type: none"> <li>People get smarter in the course of time.</li> <li>People could 'not yet' use electricity or other materials than for example wood or stone.</li> <li>Objects of the present are <i>more beautiful, richer, posh and real</i>.</li> <li>Objects of the past are <i>weird, dirty, broken, worn-down and old-fashioned</i>.</li> </ul>
Sequences	Characteristics of pictures are confusing  Naive reasoning as in 1 to 4	<ul style="list-style-type: none"> <li>Black-and-white and grey pictures are older than coloured ones.</li> <li>Photos are more recent and more real than drawings / paintings.</li> </ul>

**Table 3.** Overview of problems that students experience when placing historical phenomena in time (De Groot-Reuvekamp et al., 2019).

Most pupils found it difficult to place historical eras on the timeline and to link these with dates and centuries. Furthermore the interviewed pupils had only limited knowledge of characteristic aspects

of the ten eras. In addition, both younger and older students regularly reasoned from presentism, assuming that people have become increasingly intelligent over the course of history and that in the past everything was "worse". They called objects from other times "strange", "dirty", "broken", "worn out" and "old-fashioned". In addition, many pupils thought that black-and-white images were always older than coloured images, since "long ago everything was black and white, because then there was no colour." Table 3 gives an overview of the different types of problems, related to the five objectives on the understanding of historical time.

*d. Timewise: an educational approach to improve the understanding of historical time*

In order to improve pupils' understanding of historical time, Timewise has been developed. This approach is based on the model with the five objectives and the three stages of development in Table 2 and uses timelines, stories and images. Timewise was developed in line with the core objectives of primary education in the Netherlands (see Table 1) and can be used independently or combined with regular lessons for history or world orientation. Timewise was tested by an experimental group of sixteen trained teachers in grades 4 and 7. Before and after their pupils took the test that was elaborated on in paragraph 5.3. The results showed that pupils in the experimental group achieved significantly higher learning gains than pupils in the control group (De Groot-Reuvekamp, Ros, & Van Boxtel, 2018b).

Timewise consists of three introductory lessons about the timeline and the ten eras of the Dutch curriculum, followed by weekly activities on the different eras. The full descriptions of the lessons for grade 4 (initial understanding, stage B) and 7 (continued understanding, stage C) can be found on [www.historischtijdsbesef.nl](http://www.historischtijdsbesef.nl). In the first three lessons the timeline is introduced, supported by PowerPoint presentations that can be downloaded from the [www.historischtijdsbesef.nl](http://www.historischtijdsbesef.nl). The introductory lessons for stage B start with an activity in which pupils create a timeline of their own life (Figure 3). In the weekly lessons, the timeline is always the starting point for an exploration of events and people in a historical era.



**Figure 3.** Grade 4 pupils create a timeline of their own lives.

In every lesson, the objectives of the understanding of historical time are addressed in different learning activities. After an introduction with a story or a video, pupils discuss the characteristic

aspects of an era with questions such as: how long was this (objective 1 and 3)? How did people live in that time (objective 4)? Which sources have we found and what is still left of this time in today's society (objective 5)? What is different now and what is still the same as in the time of ... (objective 5)? How was that in the era before/after? And now, in our time (objective 5)? The lessons are concluded by choosing a picture (on the Interactive Whiteboard), which pupils think well represents the era, to be attached to the timeline (see Figure 4).

The timeline on the wall of the classroom plays an important role in the Timewise approach. Two timelines have been developed: for the level of initial understanding of historical time (stage B) and for the level of continued understanding (stage C).



**Figure 4.** A timeline (stage C) on the wall of the classroom in grade 7.

Each timeline consists of different layers. The bottom layer represents the concept of emergent understanding of historical time (stage A), with as time indications: "the longest ago", "a long time ago", "long ago" and "now". Because the bottom layer is linked to the layers with the names of historical eras, pupils become more and more familiar with the names and icons of different historical eras. The timeline on initial understanding (stage B), consist of an overview in six historical eras: Hunters and Farmers, Roman Times, Middle Ages, Era of Steam Engines, Era of the World Wars, Era of Television and Computer. The timeline on continued understanding (stage C), contains all ten eras of the Dutch curriculum.

Since the paper timeline is constantly visible, it can also be referred to during other lessons, for example Dutch language of geography. Through activities with the timeline, pupils can practice with the objectives on the understanding of historical time. To stimulate this practice, there are exercises on the Timewise-website with a digital timeline, on which pupils can drag images to the correct place on the timeline, see <https://www.historischtijdsbesef.nl/en/tijdwijs/>

Together with the timelines, which were the main instrument for the application of the methodology, teachers were also provided with lesson plans, listing the objectives for the lessons; an overview of pupils' development in the understanding of historical time; background

information on the main characteristics of the ten eras; and visual and audio materials they could use throughout the lesson (De Groot-Reuvekamp, Ros, & Van Boxtel, 2018a). These educative curriculum materials were meant to support teachers in their teaching and learning. All materials and the complete manuals for Timewise-lessons for the stages of initial and continued understanding of historical time can be found at [www.historischtijdsbesef.nl](http://www.historischtijdsbesef.nl).

## Conclusion

The development of the Timewise approach was part of an initiative to improve and change Dutch history education, aimed to improve the understanding of historical time of pupils aged 6 to 12. The Timewise approach can be adapted to three different stages of development for pupils' understanding of historical time. Furthermore the approach offers a tool for teachers how to anticipate on problems that can occur in pupils' learning about historical time. Many pupils with different or special needs have problems with the traditional way history is often taught, with reading texts and answering questions on worksheets which makes that they experience history as daunting. The audio and visual materials and the practical exercises of Timewise invite pupils to be active. They can for example sequence pictures by touching and dragging them on the (digital) timeline, which improves engagement and concentration.

The timeline is the core of the methodology. The different layers and their visibility allow teachers to adjust the timeline not only according to the age and development of the pupils, but also according to the specific needs of their students, relating to specific parts of the curriculum. Furthermore, the presence of the classroom timeline serves as a framework which is always visible. Additionally, the fact that each era is associated to a symbol, is really helpful for pupils who need to relate phenomena, persons, and events to eras. This is especially true for all those pupils who need structure to learn. The timeline helps pupils grasping an overview of history, also for those pupils who find history more difficult. The study of De Groot-Reuvekamp et al. (2018b) showed that it is possible to effectively teach history to pupils in different stages of understanding of historical time and even to young pupils (ages 7-8).

The development of pupils' understanding of historical time requires thoughtful teaching linked to objectives, with regular assessments, good timelines and good planning through all years of primary school. Timewise makes this possible with a complete set of educative curriculum materials, thereby serving as an example of an inclusive learning environment, which supports all pupils in developing their understanding of historical time.

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