

Cooperative learning:

the place of pupil involvement in a history textbook

Pupil involvement is at the heart of every good history lesson. Its planning ensures that pupils are given the opportunity to think for themselves, share ideas, discuss evidence and debate points.

The history education community has already generated a range of strategies to encourage effective use of group work. Yet different teachers and different contexts yield very different language with which to characterise and describe such strategies.

In *Edition 119* of *Teaching History*, Jacques Haenen and Hanneke Tuithof described Year 7 working as a team to design a historical game about a medieval peasant.

More recently they have worked on a Dutch textbook to make cooperative learning an explicit part of the textbook experience. In this article they discuss some of the strategies that they have used

and the way in which Dutch teachers have responded to the new course. This piece may refresh your ideas for pupil involvement in your own classroom or perhaps cause you to consider to what extent you share the aims of cooperative learning with your own pupils.

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Cooperative learning is a powerful tool for history teachers in today's classrooms. Almost every history teacher uses cooperative learning techniques such as 'think-pair-share' or 'word webbing' and various issues of *Teaching History* showcase examples of cooperative learning tasks.¹ However, in the Netherlands, this practice is not systematically reflected in the commonly used traditional textbooks.² Of course, these textbooks contain instructional materials mentioning and widely utilising cooperative learning, but not in a way that ensures cooperation pervades the educational experience of pupils throughout the course. While visiting schools and classrooms, we have observed that teachers themselves design and adopt cooperative strategies to supplement the written curriculum and promote pupil involvement. As teacher educators and textbook authors we decided to redesign a Dutch textbook, inserting exercises to explicitly enable cooperative learning. One of the advantages of such an approach is that as the teacher uses cooperative learning strategies repeatedly and reserves the teaching time to discuss and practice them with the pupils, so the pupils become increasingly familiar with different sorts of cooperative learning structures. This article illustrates this practice and shares some evaluations from Dutch history teachers.

Pupil involvement and the textbook

Cooperative learning (CL) is often used to enable more pupil involvement in the classroom.³ As teacher educators, we have published on this issue and used cooperative learning as a powerful tool for pupil-centred teaching.⁴ Inspired by Spencer Kagan, we have translated his materials for use in Dutch classrooms. We have adopted his definition of CL because he advocates the so-called 'structural approach', based on the application of structures, such as think-pair-share and placemat, seen as content-free ways of organising social interaction in the classroom.⁵ The idea of pupils working together to accomplish shared learning goals is central to the concept of cooperative learning. This means that each pupil can only achieve a learning goal if other pupils achieve theirs.

Although research has shown CL to be educationally significant, it does not have the place it deserves in traditional textbooks.⁶ In the

Figure 1: Front cover of the Sphinx exploration book



Netherlands, existing textbooks are not explicitly designed to systematically support teachers in the implementation of CL. Due to the constraints of printed media and publishers' interest in producing large quantities of standardised materials, commonly used textbooks are often chiefly focused on the presentation of specific subject themes, the 'what' knowledge, leaving pupil involvement to the teachers' initiative.⁷ In such circumstances, the onus is on teachers to design course materials themselves to supplement the written curriculum of existing textbooks.

To promote the use of CL-tasks in history lessons, materials were developed by Hanneke Tuithof, who co-authored a history textbook called Sphinx (in Dutch: *Sfinx*, see Figure 1), currently in use in Dutch secondary education. A few years ago, the textbook for upper secondary education was partly redesigned to insert teacher instructions and exercises to enable pupils to do their assignments cooperatively.

A chance to explore

Sphinx for upper secondary education is a problem – and activity-based approach to history teaching and consists of the usual arrangement of textbooks and additional materials, with one exception. Apart from the usual pupil information book with all kinds of texts about history, the teacher guide, a CD-ROM, and the Sphinx-website (www.sfinx-online.nl), there is also a companion to the information book: an exploration book for pupils. This exploration book has a central position in the course arrangement and functions as a launch pad for pupil activities. In this exploration book the teaching materials are designed from the perspective of how pupils will use them; pupils can therefore work through

the book independently, individually or cooperatively with other pupils.⁸

The exploration book leads pupils through the course materials and stipulates and suggests all kinds of activities related to historical assignments. To complete the assignments, pupils have to consult and refer to the information book. This takes the form of a reading book telling historical stories related to specific themes, such as colonialism, migration, the totalitarian state, war and peace. Pupils can find model assignment answers and specific elaborations on the CD-ROM which also contains relevant sources, video clips, pilot assignments and animations visualising historical concepts (see Figure 2 for an overview of the whole course arrangement).

All chapters in the exploration book start with activities and assignments devised to elicit prior knowledge and motivation. As research has shown, pupils with a good deal of prior knowledge are more able to stay focused on group tasks.⁹ Moreover, this orientation phase indicates the time, place and context of the chapter's subject. Next, the pupils have to carry out several assignments, some of which are designed as cooperative learning assignments. The purpose of these assignments is to foster historical thinking by having the pupils investigate historical questions together. Pupils practise the basic processes of historical investigation, such as how to evaluate and make appropriate use of sources.

One example involves pupils investigating the question 'Was Robert Owen, owner of the textile factory in New Lamark,

Figure 2: Sphinx for upper secondary education: overview of its course arrangement

The five elements of the Sphinx course arrangement are:

1. a pupils' exploration book
2. a pupils' information book
3. a pupils' cd-rom containing materials related to those brought together under the buttons Concepts, Assignments, and Exercises. These three buttons provide the pupils with materials ranging from video clips and animations visualizing historical concepts, assignments and relevant sources, and assignment answers, to pilot assessments to check whether or not the learning content has been digested and understood
4. a website: www.sfinx-online.nl, with additional and updated materials
5. a teacher's guide on cd-rom, as well as online ('teachers' room').

Scotland, a benefactor or a clever capitalist?’ The class is divided into groups of three with each pupil receiving his or her own sources about Owen’s factory and the way he treated his workers. Based on these different sources, each group has to debate the question given, writing down their answers and arguments schematised on a poster. Each group nominates a spokesperson who then reports to the whole class the points that were agreed.¹⁰

This Sphinx-aspect of ‘doing history’ throughout the whole course arrangement has been acknowledged and appreciated by teachers because this pedagogical design reflects a modern approach to history teaching. For us, the course designers, this is manifested as a focus on historical investigation. Historical knowledge emerges from a process of inquiry. This is true for the secondary education pupil just as it is true for the experienced historian. So, we want pupils to be trained in historical skills; ‘disciplining the pupils’ mind’, as Gardner has called it.¹¹

Linking reading history with doing history

The ‘doing of history’ has also been reflected in the pupil information book which is essentially a reading book. In order to explicitly link the ‘reading on’ history with the ‘doing of’ history, the information book starts with an extended chapter explaining what it means to study history. This lengthy introductory chapter is written in a language

that history learning is always accompanied by exploration activities, often executed during group work.

The introductory chapter explains to the pupils that cooperative learning is a special form of group work involving specific conditions and structures that make it suitable for learning from each other. The ins and outs of cooperative learning, its advantages and focal points are concisely described and summarised. In addition, eight structures, used throughout the ‘exploration book’, receive special attention. These eight CL structures are:

1. pair work
2. brainstorming
3. think-pair-share
4. word webbing
5. three-step interview
6. placemat
7. jigsaw
8. simultaneous sharing

These eight CL structures are deliberately designed to be basic and simple.¹² Pupils should use them to help structure their group’s work. Distributing tasks and involving each participant in the work process helps to prevent ‘hitch-hiking’ behaviour and reduces the temptation of endless chatting. The assignments which are to be done cooperatively have been marked using a special symbol (a circle consisting of four circling arrows) with an additional suggestion as to

from the beginning of the learning process, pupils
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suitable for pupils, informing them about the meaning and procedures of historical investigation and how it should be approached. It focuses on several practical skills related to doing history, such as searching systematically by using a heuristic working scheme, formulating key questions, evaluating the reliability of sources, and working together while doing the assignments. The description of skills is accompanied by task formats and work sheets in order to show pupils how to proceed when studying the concrete historical themes in the following chapters. Thus, from the beginning of the learning process, pupils are fully aware

which CL structure should be used (see Figure 3 for the description of the example assignment asking the pupils to work according to the structure of the placemat. See Figure 4 for the description of the placemat¹³).


What did the teachers think?

We wanted to come to a better understanding of how teachers actually used the Sphinx course. We therefore conducted an online survey with a focus on cooperative learning. The

Figure 3: Example assignment


Assignment to be done cooperatively

Use the placemat



Question:
Which factors have contributed most to the Chinese communists’ victory in 1949?
Use your information book and answer the question in a placemat.
Together, the four of you discuss what each has written down, and decide on what are the most important factors.


Figure 4: The summaries of six cooperative learning structures as used in the history textbook: Brainstorming, Jigsaw, Pair work, Placemat, Think-Pair-Share, and Word webbing. Source: Zewald, M. and Tuithof, H. (2003), *Sphinx voor de tweede fase havo/vwo [Sphinx for upper secondary education]*, Zutphen: Thieme Meulenhoff.

 **Brainstorming**

- form a brainstorming group of at least 4, but no more than 8 pupils
- briefly think of as many possible ideas, arguments, examples, associations (opening question: "What does remind you of?")

Be aware of the following brainstorming features:

- speed, spontaneous thinking, "Who volunteers, please....?"
- any contribution is a good one, no critical comments on each other's contributions
- unusual ideas are also useful: all ideas and suggestions are welcomed
- build on each other's contributions in order to expand and add further.


 **Pair work**

Making a written assignment:

- Form a group of 4 pupils: A, B, C and D
- A and B will be working together, as well as C and D
- A will compare the results with C, as will B with D
- A and B will then together discuss the differences between the answers, and turn the results into a whole; C and D will do the same.


Making a 'speaking'-assignment:

- Form a group of 4 pupils: A, B, C and D
- A and B discuss the assignment, as well as C and D. Agree on the time it will be allowed to take (e.g. 3 minutes)
- A and C exchange the discussion results, as well as B and D. Agree on a time span.

 **Jigsaw**


The jigsaw is a technique very suitable for saving time. Divide the contents (sources, sub-questions, paragraphs) among the pupils. Each member of the group becomes an expert in his/her part and passes his/her knowledge on to the other pupils of the group. Thus, together you cover and discuss all of the contents of the assignment.

- step 1: divide the materials or the assignment into equal parts, so that each pupil has a comparable study load
- step 2: the basic group
Form basic groups in such a way that each group is the size of the number of equal parts, e.g. 4 sub-questions means a group of 4 pupils, numbered 1 to 4
- step 3: the expert group
All the numbers 1 of the basic groups join together to execute their part of the assignment and become experts in it. The same holds for the numbers 2, 3 and so on
- step 4: back to the basic group
The pupils then go back to their basic group to present the results and pass on their knowledge to the other pupils of that basic group. It's important for the teacher to check afterwards if all of the pupils have indeed become knowledgeable about the subject content.


 **Placemat**

You need a large piece of paper and a felt-tipped pen. Arrange the pupils into groups of four.

- divide the sheet by drawing 5 separate spaces: four angles and a square in the middle
- on the outer spaces, each pupil individually and quietly writes down his/her thoughts on the topic
- together, the four discuss what each of them has written down, and decide on what are the most important points; these are then written down in the central square by the one of them nominated to do so
- each group nominates a spokesman, who then reports the points agreed on to the whole class.

 **Think-Pair-Share**

- Thinking: first, work on the assignment individually; and specify beforehand how long this will be allowed to last
- Pairing: share the results in pairs, and finish the assignment; take care to divide the time equally for mutual discussion
- Sharing: the two pairs explain to each other the results; one pupil of them then reports to the plenary session.

 **Word webbing**

In a group, individually, or with the whole class, make a word web together. When word webbing in a group, you will need a large piece of paper and, for each pupil, a felt-tipped pen with its own particular colour.

- one pupil draws a circle in the middle of the paper and in it writes down the discussion theme
- each pupil in turn adds a concept to it
- if necessary, this round can be repeated in order to add more concepts to the central theme, after which a distinction can be made between the more and the less important concepts
- each pupil draws connecting lines between the concepts
- eventually, there is a discussion about the word web; because each pupils used a differently coloured felt-tipped pen, each contribution has been made visible during the process.

questions centred on the teachers' pedagogical views in relation to cooperative learning in general and to the Sphinx course arrangement in particular.

In two online newsletters, we placed a call for history teachers using the Sphinx course to complete the questionnaire, but with only eighteen responses, these requests proved only moderately successful. However, responses show that those teachers are satisfied with the Sphinx course in upper secondary education, giving it a mean evaluation mark of 7.5 on a ten-point scale.¹⁴ These positive attitudes were reflected in the teachers' responses; half of them do not devise additional materials, relying instead on existing textbook materials and assignments. In their answers to questions to be rated between (1) 'strongly disagree' and (5) 'strongly agree,' teachers pointed to the importance of a problem-based approach to history teaching where pupils are to work cooperatively. Many teachers felt that cooperative learning assignments lead to learning results that cannot be achieved through individual work. Teachers indicated that they reserve teaching time to discuss with pupils the processes and procedures involved in cooperative learning and ways of implementing these in assignments. However, only a minority of the teachers use all the CL structures in the textbook.

We also asked teachers to assess the CL structures in terms of use, applicability, pupil preference, and expected learning effects. It is interesting to note that the preferred CL structures are those with a long tradition in teaching and (cooperative) learning: word webbing and jigsaw. Both of these structures have been well researched and are obviously well-known to the teachers.¹⁵ Teachers then showed preference for pair work, brainstorming, and think-pair-share, but clearly have less experience with the three-step interview, the placemat, and simultaneous sharing.

As researchers, we recognise these results as such preferences are reflected in our encounters in teacher education programmes and discussions with school teachers. In our training sessions with student-teachers, we always discuss and practise the five CL structures: brainstorming, jigsaw, pair work, think-pair-share and word webbing. In contrast to the responses from teachers, however, we also like the placemat! It visualises what we consider to be important features of cooperative learning – straightforward structuring of activities and thinking processes leading to a concrete product of the group's work. The placemat increases pupils' time on task, and makes thinking processes visible to both pupils and teachers. It also helps pupils to internalise content by discussing it and hearing it expressed in words other than those of the teacher.¹⁶

Three points enhance the implementation of the CL assignments. First, such assignments appear throughout the whole course, with a CL structure explicitly indicated for use with each one. Second, pupils become familiar with the use of CL structures because these are presented to them as a basic feature of the course and are described in the textbook. Pupils know how to execute any particular assignment because the appropriate CL structure is indicated. Third, the teacher discusses with the pupils how to use these structures and why cooperative learning benefits 'doing history'. Our data show

that the majority of the teachers answering the questionnaire use lesson time to conduct such discussions with the pupils. This manner of preparing pupils for cooperative learning is an explicit goal of the Sphinx textbook. This makes it different from the other commonly used textbooks in the Netherlands.

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