The Black Box of Schooling

A Cultural History of the Classroom
Opening the Black Box of Schooling
Methods, Meanings and Mysteries

Sjaak BRASTER, Ian GROSVENOR
& María del Mar del Pozo Andrés

Erasmus University Rotterdam;
University of Birmingham; University of Alcalá

Introduction

There is something strange about classrooms. They are known for a
couple of centuries. People all over the world have spent time in them.
They are the most well known physical space where formal learning
takes place. In classrooms the main players of the education game –
teachers and pupils – meet. They are like the living cells of the school,
the beating heart of the educational system. In short, classrooms have
become a synonym for education. But that does not mean that we know
many things about them. Our personal memories are coloured or
blurred. We may remember a bad tempered teacher, the ink wells on the
tables, the pictures on the wall, and that lonely chestnut tree in the
school yard seen through the window. We may remember writing things
in school exercise books, but what exactly we were writing and why,
that remains a mystery. We may also remember the days when students
from teacher training colleges were giving lectures at our primary
school, especially because during those days all kinds of hidden school
treasures were literally coming out of the closets. The working of myste-
rious machines was demonstrated; stuffed animals were exposed; wall
charts were discussed. The pedagogical plan behind it all was not really
clear to us at that moment, but many of us enjoyed it. And that was an
interesting experience, because in the perception of many of our class-
mates school normally did not equal fun.

One would expect that the pedagogical magic that occasionally was
performed in our classrooms of the past would be revealed by the educa-
tional sciences in later years. But that is not really the case. For many
decades educational science had a blind spot for classrooms. Psycholo-
gists of education for instance preferred to study pupils in a more con-
trolled laboratory–like environment, economists of education specialised in input-output models forgetting about causal mechanisms, sociologists of education were focussing on social class and societal structures for explaining educational achievements and social inequality, and historians of education preferred to study the work of dead pedagogues, laws, regulations or other printed documents in order to write “histories of education” instead of histories of “education”.

Sociology of Education and the Cultural Turn

It was not until the end of the 1960s that sociologists of education started to realize that they had to study classroom processes to understand the relationships they had found between social class and school achievements. In Britain this new orientation was called the new sociology of education, while in the United States of America people spoke of interpretative studies. These two traditions developed independently: the British one was related to the sociology of knowledge and the content of the school curriculum, while the American one was influenced by ethnomethodology, sociolinguistics, and symbolic interactionism and focused on the internal life of schools and home–school relations. Both approaches had in common that they intended to finish with the scientific arithmetic of explaining occupational success and educational achievement that was characteristic of the sociology of education in the 1960s. The focal point moved from macro- to micro theories, from determinism to voluntarism, from a quantitative to a qualitative approach, and from structure to agency. A landmark work was the book edited by M.F.D. Young entitled Knowledge and Control. New Directions in the Sociology of Education. It contained a contribution by the French sociologist Pierre Bourdieu who later would enrich the sociology of education with the concept cultural capital. Culture became a key

4 Mehan, “Understanding Inequality”, op. cit., p. 2.
word for the explanation of social inequalities. The social sciences were taking a cultural turn: attention was shifting towards cultural meanings and social constructions.\(^7\)

A famous example of this new cultural approach in the sociology of education was the ethnographic study by Paul Willis Learning to Labour: How Working Class Kids Get Working Class Jobs that was published in 1977\(^8\) and was still considered to be one of the classic works in educational sociology 25 years later.\(^9\) Although Willis should better be labelled as neo-Marxist, he shared the interpretative view that finished with thinking in terms of educational inputs and outputs without taking into account explanatory mechanisms. He also applied qualitative research methods like in-depth interviews and observation that were more familiar in cultural anthropology than in sociology or psychology, disciplines that basically relied on surveys or laboratory experiments respectively.

But Willis was not the first scholar that chose a cultural or micro perspective for looking at education. Other examples of interpretative research that focused on relationships between organisational structures of schools and social inequalities were done in England by Hargreaves,\(^10\) Ford\(^11\) and Lacey\(^12\) in the late 1960s and the early 1970s. An American example was the study by Philip W. Jackson Life in Classrooms published in 1968.\(^13\) All this research was done in a decade in which structural functionalism was under attack from symbolic interactionism, a line of sociological inquiry that was centred around the work done by George Herbert Mead, William I. Thomas, Herbert Blumer and Willard Waller at the University of Chicago in the 1920s and 1930s. Sociologist

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\(^9\) In 2002 the 25-year birthday of the book was celebrated in a well attended slot during the annual conference of the AERA in New Orleans. Two years later the work was the subject of new book. See: Dolby, N. & G. Dimitriadis (eds.), Learning to Labor in New Times, New York, RoutledgeFalmer, 2004.


\(^12\) Lacey, C., Hightown Grammar, Manchester, Manchester University Press, 1970.

of education Waller already did qualitative educational studies by in-depth interviews, participant observation, and by using personal documents like diaries and letters at the beginning of the 20th century. In this respect the cultural turn in sociology in the 1970s was in fact a return to a cultural, ethnographic and qualitative approach that was practiced in the United States in the 1920s and 1930s.

**The Black Box of Schooling**

All the studies mentioned up till now can be classified as attempts to unpack the “black box of schooling”, an expression that was coined by Lacey in 1970. Lacey did his unpacking in a single grammar school in Manchester where he tried to explain the disappointing performance of working class boys. The dominant way of thinking in terms of inputs and outputs was not sufficient to find answers to this question. He therefore applied “a black box model of research” to discover social mechanisms that normally would stay hidden with quantitative statistical techniques. In this view the words “black box” were connected with a well known approach in the social and political sciences in the 1950s and 1960s: the analysis of social systems. An educational institution in this approach was seen as a social system with the abilities and backgrounds of students as its input and their educational performance as its output. What was happening inside the box was basically unknown. The use of the words “black box” was also related – although in a somewhat negative way – with experimental research. Randomized experiments are well known for their power to generate cause-effect statements with a high level of internal validity, but they are also known for their incapacity to specify mechanisms between cause and effect. That is exactly why in recent evaluation studies, for example, a more realistic approach is proposed that is theory-driven instead of method-driven, and that specifies mechanisms and contexts before gathering empirical data.

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History of Education and the Black Box

It will not come as a surprise that historians of education have also directed their attention to the cultural domain in general and to classroom processes in particular. We quote Marc Depaepe & Frank Simon who wrote in 1995:

For the analysis of the “evaporated” educational relations we have to resort to, among other things, their reflections in diaries, letters, novels and biographies, in photographs, in exercise books, exams, course preparations, inspection and visitation reports, school prospecti and school regulations, articles in educational periodicals, alumni magazines, school papers, descriptions and remainders of school furniture, didactical material, etc. Moreover, until recently these resources have scarcely been systematically collected and/or preserved, so that it has become even more plausible that the real educational activity inside and outside the family, within the school borders as well as in the classroom, has indeed remained the ‘black box’ of the pedagogical historiography.18

25 years after Lacey introduced the phrase “black box of schooling” in the sociology of education, Depaepe & Simon introduced the same words into the history of education, especially focusing on the classroom. In both cases the use of this metaphor coincided with a change in perspective: from socio-economical to cultural. In the 1970s we saw the rise of cultural studies in the academic world with as an early example the Centre for Contemporary Cultural Studies at the University of Birmingham which employed academics like Paul Willis and Stuart Hall.

In the first decade of the 21st century sociologists of education still refer to the black box of schooling when they write about the history of their discipline.19 Historians of education also use these words, especially quoting the work of Depaepe & Simon, but also in relation with work done by French, Italian, Portuguese, and Spanish historians (la caja negra).20 Anne Marie Chartier opened up the black box by studying school exercise books.21 Juri Meda, Davide Montino & Roberto Sani followed in her footsteps with the organisation of an international sympo-

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20 Carvalho, M.Mª Chagas de, Historia de la educación y memoria de la escuela: una iniciativa brasileña para la preservación del patrimonio escolar, plenary lecture, XII Encuentro Internacional de Historia de la Educación, Morelia, México, 10-12 November 2010.

sium at the University of Macerata and the publication of an international book with 1567 pages on the subject. Dominique Julia directed the attention of researchers towards the concept of school culture. In Spain and Latin-America conferences were organised by national societies of history of education stressing the importance of ethnohistorical research. In this respect we should also mention the CEINCE, an international research centre for school culture, directed by Agustín Escolano. An important part of this institute is its collection of textbooks used in primary and secondary schools. Textbook research is an active branch of the Spanish history of education, but also in Germany and France there are important institutes that collect and analyse textbooks.

Textbooks are one of the sources that were discovered recently to open up the black boxes of schooling. We wonder however if they are the best sources available for writing stories about everyday life in schools. The problem with these sources is that we can successfully analyse their contents, which lead in many cases to conclusions about more or less expected stereotypes about gender and ‘race’ that dominate classroom instruction, but if and when these stereotypes were actually propagated by teachers in their classrooms, that is another question. In other words textbooks are a good source for analysing the content of subjects, and, to be more precise, the intentions of textbook producers, but they do not say many things about the actual use of textbooks in practice or the values that were actually transferred to pupils.

The same can be said about wall charts, the educational cardboard posters that we can see hanging in many classrooms of the past. An interesting case is presented by a set of wall charts for the history of Spain that are collected by the Galician Museum for the history of education in Santiago de Compostela. This collection is known to be the most complete set of wall charts available on this subject. Yet, using this collection the first thing the historian notices is that it is incomplete. Some charts in the series, including the first one, are missing. Others are slightly damaged, while some seemed to be untouched. Perhaps the ones that were missing or damaged are the charts that were actually used for...

23 See: www.ceince.eu
24 “Centro de Investigación Manuales Escolares”, directed by Gabriela Ossenbach, Open University, Madrid. See: www.uned.es/manesvirtual/ProyectoManes/index.htm
25 We especially mention the “Georg-Eckert-Institut für Internationale Schulbuchforschung” (www.gei.de) and the “Institut Nacional de Recherche Pédagogique” (www.inrp.fr).
26 “Museo Pedagóxico de Galicia”, see: www.edu.xunta.es/mupega.
Unfortunately, about these ones we cannot say many things – we only have the titles of the charts in the catalogue – and about the things teachers said about them, we know even less. Unless of course we look at other sources, like school exercise books or oral history interviews, a widely used research method in the 1970s, but much less used in later decades, partly because there were discrepancies between the memory of people and factual knowledge about past events. For example, a former pupil from a Spanish primary school was quite sure of the fact that the child of aviator Charles Lindbergh was kidnapped and murdered in the year 1935, because in this year – the first year she attended school – her teacher told the story. However, this kidnapping took place in 1932 and in this year this pupil did not yet attend school. Famous examples of more serious mistakes were made by people who remembered hearing radio programmes before radio was available.

But other sources have their problems too. Building plans of schools show us the conceptions that architects have about the pedagogical use of space. It shows us where the blackboard should be positioned, in how many rows the school benches should be organised, and where the windows should be placed for an optimal illumination of the work of the pupils. School benches also tell their stories. The introduction, for instance, of the “one pupil” school bench that was no longer bolted to the floor should be the starting point for a new way of working, for teaching in small groups instead of simultaneous classroom instruction. But it takes time before educational ideas become educational realities. In many occasions the modern and movable school desks used in the 20th century are still to be found in the orderly military-like ranks that were typical for their initial use at the beginning of the 19th century, although a rare photograph of the Dutch education innovator Jan Ligthart taken at the beginning of the 20th century shows us another use of the traditional school benches. They were taken out of the classroom, placed outside in the school yard – together with some ordinary kitchen tables – and used for individual work and crafts. That brings us to a relatively new source in the history of education: images.

About Visual and other Turns

The book Silences & Images, published in 1999, is a good example of the ways historians of education were dealing with the challenge presented to them by the visual.27 It also marks a clear increase in the number of publications based on pictorial sources. It did not mean, however, that all historians of education were convinced about the value

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of images for writing histories of everyday life in classrooms. Images can be quite treacherous sources. On one side they show us “objective” or “real” realities, like the type of school benches that were used in a certain period, but on the other side, they show us representations of realities or interpretations of desired realities at best. For example, the clothes that pupils were wearing on many classroom photographs are not the clothes that pupils were wearing every day. In fact in many cases the pupils were dressed up in their Sundays-bests, just because their parents knew that a professional photographer would come to take pictures of their children.

For the moment we will not elaborate further on the analysis of images or, more in general, the consequences of the so called pictorial turn for the work of historians of education. There are more “turns” that scholars in the humanities or social sciences must deal with. We mention for instance the affective turn that focuses on bodily aspects, the material turn that focuses on matter, or in other words, the agency of material itself, and most recently the sensory turn in which importance is given to the senses other than the visual. Nowadays, historians of education must be able to work with text, images, material objects, etc. The problem is not about the amount of sources available. Local archives and especially educational museums possess a large collection of material that has never been analysed. The problem is how to use these sources.

A Framework for Analysis and a Symposium

In figure 1 we present a list of possible sources that are available to understand the central unit of the educational system: the classroom. We have placed these sources in a two-dimensional space with the classroom in the middle as a black box. They are surrounded by an educational space and a social space to express the idea that classrooms do not operate in a social vacuum. All things that happen in them are at least partly conditioned by actions of policy makers like the state, policy influencers like teachers’ unions, or other stakeholders like publishers of school books or manufacturers of school material. Inside the black box of the classroom basically two kinds of actors are involved, teachers and pupils, and two types of artifacts: cultural artifacts, that refers to things created by humans (outside the classroom) which gives information

28 See the Dutch research project financed by NWO of I. Van der Tuin, *The material turn in the humanities.*

about the culture of its creator and users, and social artifacts, that are products of individuals, groups or their social behaviour within the classroom. Following these definitions school benches, text books or wall charts are cultural artifacts, and school rules and regulations, classroom organisation and examinations are social artifacts.

It was the scheme presented in figure 1 that we had in mind when we organised a symposium in the National Museum of Education in Rotterdam in June 2008. We brought together scholars from the disciplines of Art, Architecture, History, Pedagogy and Sociology. For three days we focused on classrooms and on the use of (new) sources for studying these classrooms. We made a distinction between four themes.

The first theme was images and representations of classrooms. Sjaak Braster talked about classroom photographs, Ian Grosvenor about pictures on school walls, and Jeremy Howard about paintings of classrooms. The second theme was writings and documents inside the classroom. Ana Badanelli & Kira Mahamud looked at school exercise books, Susannah Wright talked about teachers’ log books, and María del Mar del Pozo Andrés & Teresa Rabazas about observer reports. The third theme was memories and personal experiences of past classrooms. Antonio Viñao focused on egodocuments written by teachers, Arianne Baggerman on egodocuments written by former pupils of a school, and Theo Veld on oral history interviews. The fourth theme was about space and design of classrooms. Alexander Koutamanis & Yolanda Majewski-Steijns looked at architectural designs, Catherine Burke at school murals, and Frederik Herman and colleagues used a case study of the Decroly School in Brussels to explore the transformation of space. The final theme was material objects in the classroom. It was introduced by Jacques Dane, Sarah-Jane Earle & Tijs van Ruiten and they spoke, among other things, about school desks, primers for reading, and school wall charts.

Although it may look like that every author explores only one specific source, in fact all of us end up combining old and new sources for writing our histories about the classroom. Triangulation of various sources and different methods, although difficult and time consuming in practice, is still – we are all convinced about that – the best way to open up the black box of schooling.

The final product of the 2008 symposium in Rotterdam lies before your eyes now, thanks to Emilie Menz and Sandra Kuzniak at P.I.E. Peter Lang in Bruxelles. We can happily quote the words written on a monastery wall in the Middle Ages: “The book is finished. Let the
And while playing, we hope that in the mean time the readers will find some interesting new sources and the right amount of inspiration to write histories of “education” themselves.