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Learning to read: choosing languages and methods

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LEARNING TO READ: CHOOSING LANGUAGES AND METHODS
Alain Bentolila\(^1\) – Bruno Germain\(^2\)

I – Language policy

1.1 Doomed to fail

If there is one promise that schools the world over must keep, it is to distribute more fairly the opportunities to learn to read and write, thereby enabling the citizens they form to participate effectively in the economic and social life of their community. If they do not, they will be leaving by the wayside a large part of the population.

Unfortunately, we have allowed a linguistic and cultural gap to open up within schools in Morocco, Ecuador, Senegal, and elsewhere, depriving nearly half the pupils of their chance to learn to read and write, thus robbing them of any hope of doing well at school, and making their fate in society extremely uncertain. Excluded from the written word, they are incapable of formulating their ideas about the world, and unable to make an effective contribution to the development of their country.

For it is wrong to think that if they are not good at reading they will be good at mathematics, biology or computer studies. No! They will be good at nothing, as they will be incapable of appropriating the knowledge of others, using their own words. Nor should we think that, while they may not become teachers or executives they will make excellent plumbers or good mechanics. No chance of that! Today, there are increasingly few trades, however manual, that do not require solid oral and written communication skills. More seriously, after about ten years of schooling they will be sent out into a dangerous world, unable to refute obscure and magical explanations of the universe, or sectarian and discriminatory propositions, from whichever source.

Failure at school, failure at work, failure in society – that is what happens when people are unable to formulate their ideas exactly how they wish, respectfully but also demandingly. Failure of language equals failure of thought, and deprives individuals of the ability to act effectively and peacefully in relation to others and in relation to the world.

1.2 Language inequalities

In all countries with language inequalities, the choice of the language of instruction is not the only – but it is the main – cause of the endemic problems in education systems. This problem has been the subject of sterile polemical debate and the pretext for blinkered ideological confrontations, but has never been addressed calmly and objectively. The only way of taking the heat out of the debate is to state, loudly and clearly, that the only thing that matters is the child's interest and his or her academic, cultural and social future. Let us look at the facts.

In all countries with one or more minority languages, schools are sapped by a major problem: a huge gulf exists between the mother tongue that many pupils speak when they start school, and the language they will learn to read and write in, which will condemn them to a complete lack of linguistic security – both oral and written – in whatever language. This is what

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we call a situation of general linguistic insecurity. The extent and nature of this inevitable failure varies depending on the sociolinguistic situation, but for most children it results in illiteracy.

I.3 Mother-tongue languages and teaching

Creole, Amazigh, Wolof and Quechua, and many other languages are minority instruments of communication, wrongly referred to as a dialect or patois. They are in fact languages that can be said to have been unlucky. They have the same fundamental structures and communication potential as dominant languages, but for a long time were – and still are – confined to local use. Their vocabulary – and even their syntactic structures – still bear the trace of the ostracism they suffered.

Demands are now being made – with varying degrees of insistence – for schools to make amends to these minority languages for the unfair treatment they have been dealt by history. The question that should be asked before analysing teaching methods is the following: how can we ensure that this approach will lead to a better future?

Let us take an example that illustrates the requirements – but also the contradictions – involved in the choice of languages used in schools.

Haiti 1984... we are in "Kotdéfè" (Côtes de Fer), a small town over ten hours away from the capital. A team of Haitian students have come to explain about school reform and convince rural people of the need to learn to read and write in Creole. A young student aged about 20, perched on a platform, is holding forth to members of the community gathered on the beaten-earth esplanade in the centre of the village. He is talking to them about the language of their ancestors, reminding them that it was in this language that they revolted and were freed from slavery. He talks of its beauty, warmth and music (stressing the specific music of Creole). He urges them to remember that it is in Creole that a mother speaks to her child, and that Haitian children should therefore learn to read and write in this language.

At his side, those around are transported by his strong words. Their voices blend with those of the rural community, who answer as one to the questions – all of them rhetorical – our friend asks. "Ki lang Ki bon pou piti-nou? » (what language is good for our children?), to which the assembly replies slowly and rhythmically " se lang manman-nou, se lang manman-nou" (the language of our mothers). They are convinced they are taking part in one of those rare moments when a community stands up and proudly appropriates its linguistic – and social – destiny.

Then a woman stands up in the front row. She must be about 40 years old, but looks 60. Five children between three and ten years old hold on to the flowered skirt she has put on to welcome the visitors from the capital.

- Tell me, she says in Creole to the speaker, you who are such a good speaker, aren't you Pradel Loficial, son of the grain merchant from "Kafoujanpol" (carrefour Jean-Paul) ?
- Yes, says our friend, smiling broadly. That's my father, Toussaint Loficial.
- Well, Pradel, let me tell you my story. My husband died last year, leaving me just a "jardin" (field) to feed my five children. So I started to grow millet. I went to see your father to get some seeds. Before giving them to me he made me sign a paper. Disease set in and the crop was lost. Then your father came with the head of section and they told me that half of my field now belonged to them – it was written on the paper.

Then the young man's face fell visibly. Where it had been lit up earlier by faith and enthusiasm, it had now become grey and haggard. A heavy, tense and embarrassed silence fell upon the crowd. The woman carried on: "and do you know what language the paper was written in, Pradel? Guess. It was in French, not in your mother's language! Do you think, Pradel, that your father will soon
start writing his papers in Creole so that my children will be able to read them when they leave school? Do you think so?"

The woman did not speak in a particularly aggressive or indignant way, but simply spoke of injustice and exploitation, which she accepted as if it were inevitable. But she had stood up to ask for her children to be given a greater chance of resisting. She reminded us that it was in French that she had been despoiled and that it would be a while before Creole, even in writing, would be an effective weapon. She probably also thought that it was easy for people from the capital to come and sell the idea of "school in Creole", while their own children would read and write in French in any event.

We need to understand the political lesson given by this woman: going beyond the rhetoric about systematically respecting linguistic and cultural identities, often designed to appeal to public opinion, she said that schools needed to do their utmost to ensure the fairest possible distribution of the power to read and write – in other words, the power that can be used to fight dishonesty, lies and propaganda.

I.4 – Educational and social implications

Let us first look at the psychological and educational aspects involved. We need to say loudly and clearly that claiming to teach children to read and write in a language that they do not speak, is quite simply to condemn them to illiteracy, whatever the method used. This explains how the rate of illiteracy has reached 85% in Haiti, is more than 70% in Senegal and is approaching 55% in Morocco. In short, this means that it is essential that children learn to read using their mother tongue – the only one they have when they start school. This is the situation of children who speak Creole in Haiti, children who speak Wolof in Senegal and children who speak Amazigh in Morocco. It is not the case for young Breton, Basque and Occitan speakers. In other words, one must not confuse the educational urgency of children using their mother tongue with a fashionable cultural trend aiming at transforming schools into kaleidoscopes of languages and cultures.

Teaching children who do not speak other languages to read and write in their mother tongue is essential, as it is their only chance of seamlessly entering the world of words and then learning to read and write in their respective national languages. Holding lessons in Breton or Occitan for children most of whom only speak French is a pure educational fantasy.

Let us now look at the social and political dimension of the issue of introducing children's mother-tongue languages into schools. The impact of starting to use them in schools is not enough to give these languages – which have long been marginalized – true political and cultural status. Using them in schools is in itself not enough to give them the legitimacy acquired historically – and sometimes unfairly – by the dominant language. What specific transformations can we expect in the society of a school that has decided to teach children to read in Creole, Wolof, Quechua or Amazigh? Will the social and vocational futures of pupils really have changed? Very little, is the answer, if such a decision is not accompanied by far-reaching transformation of official communication. Schools teaching children to read in their mother tongue will only be exposing their pupils to an uncertain future, if newspapers, courts and government services remain areas where the dominant language alone is used. It would amount to turning the school into a cultural "isolate", which would be at best a mistake, and at worse a deception. We need to acknowledge that linguistic situations are a simple reflection of social situations; inequality matches inequality, injustice matches injustice. Linguistic situations can only change if the relationship between the social forces that govern them changes significantly. A decree or a charter will never have the power to abolish the inequalities that history has imposed between languages. Anybody who believes that languages can simply be made "official" overnight clearly knows nothing about them. A minority language can only evolve as fast as the history of the people who speak it. It will only
develop new oral forms, or extend its writings, if new communication challenges are genuinely proposed for the language. Languages react badly to being given a status on paper that does not correspond to real social, cultural and economic territories that it is sincerely invited to conquer. Then, and then only, those languages will write the words to tell of this world they have been thus far excluded from; then and only then will they invent the expressions and structures that can give this newly inhabited world a meaning, which will necessarily be different to the one imposed so far by the dominant language.

The need to make Amazigh, Quechua, Wolof or Creole the language in which children who only speak that language learn to read and write for the first time is self-evident: it is the only way of giving those children a chance to escape illiteracy. However, once children have acquired the solid basis of having learned to read and write initially in their mother tongue, literacy teaching in the dominant language must then follow, as it is in this language – albeit unequally – that children's social advancement will be determined. It is therefore in this language that curriculum subjects must be taught. Those who dream of mother-tongue languages being used immediately from pre-school to university level, are deliberately ignoring the reality of the sociolinguistic power relationship, conveniently shying away from the patient and unremitting work that needs to be done to ensure the possibility, history page after history page, of mother-tongue languages having an important role in the social communication of the countries concerned. If we are not prepared to strive day after day to change the relationship of power between languages within social, economic, legal and cultural structures, as Catalan and Hindi have managed, for example, the use of languages such as Amazigh, Creole, Quechua and Wolof as languages of instruction will in no way guarantee improved social and vocational integration of pupils. Pretending the opposite is deceitful; for schools must be the place where children are intellectually trained to confront the real world, and to make their place in it. Teaching children who are starting school to read and write in their own language is a necessity; building on this instruction to give them rapidly the keys of the official language is an obligation. Schools' priority is to enable a maximum number of pupils to master the language of social advancement, but it has to be made clear that this cannot be built upon the ruins of their mother tongue. The key to combating functional illiteracy therefore lies largely in this capacity of education systems to respectfully take on board pupils' specific linguistic and cultural requirements, at the same time ensuring that all pupils master the language that will enable them to forge their social and vocational destiny.

**II – Choosing methods for learning to read**

Language policies; the need to combat illiteracy and prevent functional illiteracy; and the quest for effectiveness and improved performance in mastering the language(s) of instruction, require all countries to give serious thought to teaching methods that could improve the teaching of reading and writing. Since different languages have specific characteristics and their written transcription is based on different systems, it is legitimate to have different methods that can be applied and adapted to the different situations of these languages. Some aspects are worth pointing out:

- Scientific, historic and contemporary events, and international comparative studies such as PISA 2000 and PIRLS 2001 or the sociolinguistic study of education systems in countries using the same mother tongue, show us that countries with the same language of instruction do not necessarily use the same reading method. The choice of method would appear to depend on various factors, including the assigned learning objective; the extent to which research is taken into account; the dominant ideology; teacher training; and the organization of the school...
Moreover, it can clearly be seen that children's reading performance varies extremely, and that the differences tend to increase as the years go by. The conclusions of the 2003 PISA study\(^5\) show that the best results in 41 countries, for 250 000 pupils, were obtained by Finland, Korea, Canada and Australia, with France, Germany, and the United States of America showing just average results. The countries with the poorest results were the Russian Federation, Turkey, Brazil and Indonesia, where living standards and reduced access to education may explain the relatively poor performances.

- The choice of a method for teaching children to read is often the subject of polemical debate, referred to as the "great debate\(^6\)", "big question" or "reading debate\(^7\)"; this is true of the United States, Brazil, France, Morocco and Japan. In other words, in the same country, the choices made change over time, possibly when the policy relating to mass education changes emphasis for political, social, ideological or philosophical reasons.
- When choosing a literacy method at national level the criteria involved do not depend solely on the structure of the spoken languages and their written transcription. Cultural, ideological, political, sociological and historical preconceptions may bring very strong pressure to bear and explain certain choices.
- The extremely diverse and mixed situations existing between the oral language(s) practised and the written language(s) used in different social, educational and academic contexts mean that any international comparative modelling of the methods for teaching them is necessarily complex.
- In recent years research has made considerable headway in learning about how children learn to read, and the pitfalls and handicaps encountered in the process, thanks to many converging studies in various disciplines. These studies range from a detailed description of languages and their structure – in the field of linguistics – to the processes and mechanisms involved – in the areas of cognitive and developmental psychology; psycholinguistics; the sociology of reading; and, in particular, neuroscience. It is now therefore possible to categorize the different reading methods and make a number of recommendations, according to the languages and writing systems involved.

II - 1) Reading methods

Distinguishing between learning and teaching to read

A method for learning to read is based on a series of theoretical principles modelling the organization and procedures involved in teaching to read. Extensive research on learning has been carried out by psychologists and linguists for a century. The contribution made by neuroscience has been considerably advancing knowledge in this area for the last twenty years or so. The research carried out – the results of which sometimes seem contradictory, as they are dynamic and often specific to one type of language – nevertheless enable a number of fairly consensual guidelines to be drawn up.

A method for teaching to read involves choosing an approach involving a number of particular steps and related tools. It tends to be education specialists, politicians or philosophers who define

\[^5\] Learning for Tomorrow’s World – 2004
\[^6\] Chall J.S. (1967) Learning to read, the great debate, McGraw-Hill, NY
\[^8\] Observatoire national de la lecture, Germain B., Les methodes de lecture, Le manuel de lecture au CP, 2003, Scéren, Hatier, Paris,
the methods, using or interpreting a given aspect of research. A reading method may therefore be based more on an ideology or educational policy than exclusively on objective work carried out in the area of learning.

**Distinguishing between methods and manuals**

Sometimes, teaching methods are confused with teaching materials (the manual, whether in paper, media or electronic form). This is perhaps because a method is named after the respective manual's author, or because the manual is imposed universally as the exclusive "teaching method". The method and the manual(s) used in a country often depend on the objective assigned to learning to read.

**Debates, quarrels, misunderstandings and future outlook**

The debate usually revolves around at least two alternatives, sometimes opposing political and ideological points of view, in relation to the education system, and sometimes opposing theoretical principles derived from research.

Sometimes the debate is based on empirical observations, such as "illiteracy or functional illiteracy rates are high"; "reading standards are falling". etc. In this case it looks at the policy thrust of the education system, in relation to the most suitable teaching methods for meeting a specific objective; for example "what method should be encouraged to ensure the mass eradication of illiteracy?" or "how can reading performance be improved for everybody?", or even "how can democracy be extended?". The contrasts appear to be completely ideological. This was particularly the case in the 1960s and 1970s. The "global method" was highly controversial at that time in the United States (Flesch, 1955) while the "syllabic method" was criticised in France (AFL).

Paradoxically – and this shows the subjectivity and passion sparked by the issue of reading – these contrasting criticisms are a response to the same unfavourable large-scale statistics and, especially, the same ideological concerns. These concerns arose from the massive spread of literacy programmes and the desire for increased study levels, on the one hand, and – on the other – the interest of the social sciences in reading as an object of power and the reproduction of a certain social construct: how to democratize universal access to power by sharing the art of reading, writing and speaking? Interest focuses, therefore, either on meaning – the "noble" part of reading – or on decoding, the purely technical part based on the minimal structure of the language. There were strong reactions, as shown by the comparative studies of the time (Chall, 1967, 1983), in the attempt to defend and accentuate the need to learn decoding, or "phonics". The quarrel lasted for 20 years, but in an endemic way. It resulted, for many countries, in an attempt at consensus, from the 1980s onwards, with the emergence of a "mixed" or balanced method (NAEP, 1992), which is found in most reading manuals and classroom practices.

In some cases the debate arises from research in different fields of study. Initially, studies focused on the skills employed by expert readers, or on reading deficits, then on learning to read. Most opposing views, from the 1980s, concerned the different components involved in learning to read: identification of words (language processing units) and comprehension (semantic processing procedures). Different models emerged, according to the hypotheses of various researchers and their fields of study, particularly psychology and psycholinguistics.

Some American psychologists (Stanovich 1981, Perfetti 1982, Lesgold & Perfetti, 1985; etc.), referring to information processing theories, stress the existence of a "central processor", at cognitive level, which manages lower-level data (letters and words) and upper-level data (reader knowledge) by interaction between bottom-up processes and top-down processes. Their hypothesis of a limited processing capacity leads them to emphasize the automatism of low-level procedures (which some reduce to graphophonological associations) in order to free the active attention
mobilized in processing the bottom-up flow of data (Adams & Starr 1982). This is considered to be an interactive model. The resulting debate concerns the nature of the interactivity under consideration according to two explanatory paradigms: that of Fodor (1983) and that of Johnson-Laird (1983). The bottom-up process – which links signifier (graphemes) and signified (meaning) and uses low-level data (graphic indices conveyed by the text) – is contrasted with the top-down process – which influences perception data and guides the search for information, using high-level data (knowledge of the subject, objectives, environment, etc.).

These studies stem from a basic hypothesis which systematically links, in a single construct, form and meaning.

A greater body of research, in experimental and cognitive psychology, psycholinguistics and neuropsychology, more accurately distinguishes the components involved in learning to read (Cain & Oakhill, 2003) and teaching to read. First, the processes of perception of words or signs and access to the lexicon (Sinatra, 1990; Vitu, 1990; Alégria, 1991; Gombert, 1996; in particular), and second the study of comprehension and semantic integration, inference and representation (Fayol, 1989, 2000; Denhière, 1992; Trueswell, 1994; for example). Control and regulation of these two components is included as well (Fayol & Goanac’h, 2003).

The processes of word identification are based on studies which for thirty years have shown and confirmed that reading requires a complex set of procedures specifically devoted to the activation of orthographic representations of the written language and their transcoding into phonological representations of the spoken language (Morais, 2004). There is therefore something quite specific about learning to read: the recognition of written words or signs. It is noted, in particular, that reading consists not in understanding but in matching graphic representations to their pronunciation and/or their meaning. The learner must therefore – in alphabetic languages in any event – understand the principle of these matches – called the "alphabetic principle" – and must then know all the relevant combinations in the language in question (a necessarily limited number), automatize use of this to the point of near-instantaneous perception of words in a text, including words never seen before (Metsala & Ehri, 1998). Whatever the language, autonomous perception of words and/or signs must be possible. The "global" perception of words is therefore widely disputed since it challenges the application of the alphabetic principle, or the considered observation of the composition of the oral and written aspects of a language (Content, 1992, Thompson & Nicholson, 1999), placing instead too much emphasis on the perception of whole forms, and therefore on recognition linked to the predictability of perceiving words through vague aspects such as the silhouette of words and signs (Thompson, 1999).

The other aspect of the studies concerns comprehension, and learning to comprehend. The mechanisms involved appear to be more general, since they concern the elaboration of coherent representations, in numerous activities. These mechanisms were unknown about for a long time (the most meaningful studies were carried out in the last 20 years), and relate to comprehension as it develops during reading, the integration of data in a mental representation, and use of the interpretation in the light of personal experience and knowledge. When these mechanisms are poorly mastered, they are the cause of deficits for at least 15% of learners (Palincsar & Brown, 1984; Nation & Snowling, 1998; Bianco, 2003). The development of reading strategies, for processing types of texts (Magliano, Trabasso & Graesser, 1999) was explored by the metacognitive approach (Zabrucky & Commander, 1993; Rémond, 2003). It is therefore important to take this into account during the process of learning to read, by coordinating the decoding of signs and written forms, and comprehension – two complementary and simultaneously competing dimensions involved in the act of reading.
Working on compensation procedures for the comprehension of written texts also helps all future readers: the mechanisms used for processing text are specific and are particularly based on the characteristics of the written word: permanence and the possibility of modulating reading speed (Walczyk, 2000). The possibility of rereading and skipping back is one way to considerably improve comprehension, which explains, in this area, the increased effectiveness of reading over listening to texts (Levy, Nicholls & Kohen, 1993).

Classification

We classify reading methods taking into account two criteria. First, the language processing units of a given language (signs, letters, sounds, words, text), in accordance with the characteristics of the written text. Second, the procedures being developed when learning (in particular from the "initial" unit to the "final" unit, for example from the letter to the word).

There are few separate methods; each one is built on a number of identifiable characteristics and theoretical principles originating from research on the different dimensions of expert reading and of learning to read. Each method is broken down into several "approaches", each of which implement the method in a specific way.

The indirect method of access to meaning

This method consists in introducing to pupils the smallest units of language (minimal units), in the spoken and written language, and matching them. These small units (signs, letters, syllabic characters or graphemes for written language – sounds or phonemes for spoken language) are combined to make larger elements (syllables, morphemes, words, then sentences). Following convention, we will call this approach the “indirect method of access to meaning”, in the sense that it involves the combinatorial analysis of graphic units of the language, sometimes resulting in meaning.

This method applies in particular, but not exclusively, to languages with alphabetic writing. In these languages, the written forms are closely related to the sounds that make up words, in varying degrees of regularity and reciprocity (Metsala & Ehri, 1998). The various teaching approaches practising this method are characterized by the minimal unit on which correspondence between the oral code and written code is based.

The phonological or phonographic – "phonics" – approach

This approach consists in developing perception of the minimal units that make up the chain of spoken language (sounds, phonemes, arranged in oral syllables) and transcribing the corresponding written units (graphemes, written syllables). Starting from what children are familiar with – the spoken language – they are introduced to what they are not familiar with – the written language. This is easy when the language has a sufficiently high degree of regularity between the spoken and written word. Through observation and "trial and error" production activities, each child is encouraged to handle language combinations. The child learns through the development of phonemic awareness (the child learns to observe what s/he says from a metalinguistic point of view of the sounds s/he utters or hears); understanding of the alphabetic principle (Morais, 2000) (the child understands that there is a relationship of frequent and more or less regular correspondence between spoken and written language); and the automatism of word identification (combinatorial analysis and knowledge of the orthographical code followed by constitution of a

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8 We preferred to avoid using the commonly-used term "synthetic method" as it is confusing. This terminology is only justified if one considers the teaching of reading exclusively from the point of view of procedures; it then entails the successive combination of small units into larger units.
mental dictionary) which enables the child to read increasingly rapidly and instantaneously the words making up the sentence and the text (Alegria, 1990; Morais, 1994).9

The syllabic approach
The main characteristic of this approach is that it is based on the knowledge of letters and the combination of written forms and written syllables that are spoken aloud (the oral syllable is an easily recognized unit of breath). If the name of the letters is spelled out b – a [Ba] this is referred to as the alphabetic method. Sometimes sign syllables or morphemes are combined in words (Japanese Kana, for example).

This approach is often used for mass learning, or for the implementation of a literacy policy (France, Japan, Argentina, etc.).

The phonographic approach
This is a subtle variant, exploring near-simultaneously the graphic code of the written language – by observing and contrasting the forms and words naturally present in texts – and the oral phonological code – by developing phonological awareness and work on oral syllables. This approach focuses on the discovery of codes and what they correspond to (in particular the phonological aspect of any language) and other strategies, for example morphological or lexical strategies (Jaffré, 1993, 1997), when they provide valuable or necessary assistance (in particular for languages where the graphic system and grapheme/phoneme relationship is opaque and irregular).

The main criticism that can be made of the indirect method of access to meaning is that it dismisses the fundamental work on comprehension (Ferreiro, 2001). Working on the structure of the language and the knowledge of the written code, of any kind, is not enough to train readers. Decoding a text does not automatically result in its comprehension.

Added to that is the fact that some children can find this purely technical, abstract and repetitive activity – if practised exclusively – tedious, and rapidly lose interest. Lastly, for some languages, particularly those with complex and irregular grapheme codes, this method lacks the ability to easily overcome problems with spelling or written production.

The direct method of access to meaning

This method considers the comprehension of texts to be the objective of learning to read, as well as the way to teach it.

Considering that children can learn to read as naturally as they learn to speak, this method focuses on immersion in the large written language units: texts. On a trial-and-error basis, learners discover the meaning conveyed by texts, by observing the smallest components (textual structure, syntax, words, meaningful linguistic signs, etc.) and formulating successive hypotheses. Following convention, we will call this approach the direct method of access to meaning10 since it starts from the text as a whole, going on to look, in varying degrees, at the different parts. Using knowledge of a code is considered unnecessary: it is not one of the objectives here. The teaching approaches that

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9 Here again, we have avoided certain disputed terminology used in research. A distinction is made for the expert reader between the indirect reading channel – decoding, and the direct channel: rapid perception of decodable frequently read words, stored in the mental dictionary.

10 We will not use the term “analytical method” whose wording is based on the idea that, during the production phase, the learner starts from the whole unit (the text) and progressively analyses the hypothetical meaning. One should not confuse “direct method of access to meaning” with “direct reading channel”, which is not used (in its theoretical sense) in this method, since the words are learned or recognized without being decodable.
use this method are characterized by the way they approach texts and the tools used to explore their meaning.

**The whole language approach**\(^{11}\), the most well-known approach, consists in directly applying the characteristics of the direct method of access to meaning. Learners rely on the context in order to formulate hypotheses on the meaning of sentences and words. What matters is understanding the whole, or global, meaning of the text, even if some words remain unknown. Exactness is not the objective of reading. The words are stored as logograms (Adams, 1979; Rumelhaert & Mac Clelland, 1981), something that was subsequently strongly criticized (Frith, 1986; Morgan & Coltheart, 1988; Sprenger-Charolles, 1992; Gombert, 1996: Morais, 1998). By a process of trial-and-error, the child integrates new words and new meanings, through comparing and formulating hypotheses (s/he uses the same approach to writing texts, by successive comparison with forms already encountered). Learners are "immersed" in authentic text, for example in books. An appropriate image would be that of somebody learning to swim who, after observing freestyle swimming championships, is thrown in at the deep end of the pool and obliged to find acceptable movements to save themselves from drowning. The "whole" approach is part of a broader vision of school education, in which learning to read is not the essential priority. It is implemented through a teaching method where children must build their learning using their own experience (with the teacher as mediator).

**The ideovisual approach** is still the subject of research for the French and English language (Foucambert, 1997). This approach considers words as entities that are perceived, initially, using their shape, or "silhouette" (Legge, 1992; Foucambert, 1994). The words are then observed, classified, compared, sometimes analysed, then used, both for reading and for writing (children rapidly produce sentences with "word-labels"). The stated objective of this approach is first to motivate learners, by rapidly giving them the illusion of recognizing words or linguistic signs, and therefore the meaning of the text containing them. The learners study the texts, deciphering them in a Champollion-like manner, comparing their hypotheses in groups and being guided in their work by the teacher. The approach then seeks to promote access to meaning through rapid perception of words or signs and direct co-influence between the graphic and contextual processes (Rumelhaert & Mac Clelland, 1981). It focuses on the use of books and texts (sometimes compiled specially, using highly predictable words), affirming that reading is a priority.

**The natural approach** was developed by Célestin Freinet. It is a variant of the *direct method of access to meaning*, since it projects children into texts that relate to their environment or that they produce, and which correspond to their interests and past experience. The idea, again, is to rapidly motivate learners. Nevertheless, this approach integrates the use of techniques such as printing, in particular for producing written words, which requires observation of syntactic structure and code. It is therefore an approach that works from the largest units downwards, in order to give the reading meaning, but using where necessary observation of the smallest signs and units that make up words. The natural approach places reading at the centre of learning is taught using active teaching methods.

The main criticism that can be made of the *direct method of access to meaning*, and most of its variants, is that it underestimates the importance of the phonological or phonemic approach to language, often dismissing it altogether. This can have a very negative effect on the autonomy of reading; particularly for children whose environmental or family cultural level is not high. These approaches requiring a strong vocabulary and existing comprehension skills can cause real

\(^{11}\) Footnote valid for French version only.
problems for some children. For the work of formulating hypotheses about meaning (which is always uncertain by definition, since meaning is dependant on the context in which words are strung together) requires the child from the outset to already possess many of the skills relating to comprehension of written texts. This constraint is found in the slogan "Reading is understanding", which unfortunately confuses the goal of learning to read with the means employed to achieve it. A better formula would be "Reading to understand". Lastly, teachers wishing to develop this method must be well trained, and themselves master the language perfectly (as well as its metalinguistic and semantic observation), in order to be well prepared at all times to accompany the children's trial-and-error work. To be effective, finally, this method and those derived from it, require a high degree of continuity and consistency of learning, over several years.

The mixed method

In alphabetic written languages, especially in countries where there has been radical polemical debate, an alternative came into being that appeared to provide a compromise for everybody: a combination of some characteristics of the direct and indirect methods of access to meaning (NAEP, 1992, in the United States).

The joint mixed method consists in learning, simultaneously and throughout the years, how to handle the meaning of small sentences or texts (coming across many key words learned by heart, or highly predictable – the model found in the direct "whole" or global method) and knowledge of syllables and letters making up words – the model found in the indirect syllabic method).

The two procedures are literally set in competition against each other in the representation of reading that children try to build, over the year. This results in confusion for some pupils, who hesitate in the strategy for discovering words, signs and meaning.

Sometimes, the extent of "mixing" is limited to the variety of texts that children learn to read: sometimes the words of the text are decodable, and at others they are highly predictable in terms of "global" recognition.

The linked mixed method consists in general in working on texts and sentences in a "whole" manner initially, then moving onto a syllabic approach when it comes to breaking language down. Sometimes this is done in reverse order, as in Japanese for example.

In alphabetic languages, this approach is considered to be likely to cause problems for fragile children; for it starts by giving them a false impression of what reading entails at the start of the learning process, and then goes on to look at code via its most artificial aspect: combinatorial analysis.

The main criticism that can be made of the mixed method (Germain, 2003) is that it makes learners somewhat unstable. They no longer know what reading approach to adopt, and their representation of the written language is unclear. Mistakenly believing itself to represent the best of the other two methods (motivating children and making them autonomous), the mixed method often uses the worst (overloading memory, mixing up word recognition systems).

Too few international comparative studies have been carried out on reading methods related to pupils' performance results to allow us to draw final conclusions on the most suitable method for each type of language. A number of serious longitudinal studies have been carried out for certain languages (Content, 1992), which showed considerable variation in the development of reading skills, particularly concerning word identification, depending on the method used. For example, learning French using the direct method of access to meaning would not prevent a learner, after four years of study, obtaining high levels of performance in reading "pseudo-words". In other
words, children end up setting into operation processes they have not been taught, in particular the observation and subsequent breakdown of word units.

A study is being carried out in France (Sahuc & Gombert, 2005) on the writing performance of children, in relation to the method used to learn to read. Other comparative studies (Ziegler, 2004) between alphabetic languages show the influence of the regularity of correspondence between written forms and spoken forms on reading performance, clearly calling for phonological methods to be used when learning to read, for the most regular languages.

II - 2) Recommendations

The choice of method used to learn to read will have a real impact, not only on the performance of the future reader but also on his/her representation of the written language and its everyday use. Of course the effect the teacher has, and what s/he does with the method used, is very important, but we do not have enough studies at our disposal on the observation of teaching practices to make meaningful recommendations.

A method for learning to read must enable pupils to master the written language, in terms of both reception (reading) and production (writing), fostering autonomy and versatility (Bentolila, 1998). Each future adult must be able to read all kinds of texts and be able to understand them. Of course, the case of each language deserves to be studied individually. Nevertheless it is acceptable, as a minimum, to propose the framework of an integral method for learning to read, based on three components which should be simultaneously worked on, each one by itself being insufficient (Germain, 2005). We could formulate the proposal differently: any approach to teaching children to read should, more or less, integrate the following three characteristics:

Learning to recognize words: "automatism"

— If we consider that research shows us that our intellectual skills allow automatism requiring little cognitive effort and, simultaneously, management of an attention-based activity of comprehension (Yuill & Oakhill, 1991; Fayol, 1992); and
— If we accept that, whatever the language spoken and whatever the written code of this language (for example, the dominance of the ideogrammatic code in Chinese, or the semiographic code of Japanese), the phonological relationship is never totally absent (Ziegler, Tan, Perry & Montant, 2000) and justifies, in one way or another, a (contextual or more phonemic) observation of the language's signs, morphemes, characters or graphemes. In other words, if we acknowledge that phonology is a characteristic of all languages – to a greater or lesser extent – and deserves to be addressed when learning to read (Share, 1995; Galan, 1995, Ziegler & Perry, 1998 et 2000; Goswami, Ziegler, Dalton & Schneider, 2001);

then it is reasonable to stress the following:

* The need for analytical phonic or graphophonics type learning in all languages with alphabetic written transcription (including languages based on a consonant root system, such as Arabic, and syllabic transcription languages such as Japanese Kana). A joint mixed approach would be acceptable when the language has a particularly irregular system of spoken/written correspondence. For all alphabetic languages, the essential elements of teaching to read are as follows: development of phonic awareness; perception of the alphabetic principle and knowledge of the regular code and its frequent irregularities; followed by the automatism of coding/decoding, through the development of rapid access to an orthographic dictionary built up through frequent reading. For many researchers, this learning needs to be accompanied by the relationship between
the phonography of the language and the principles more directly involved in representation of the meaningful units (with importance attached to morphology and spelling, if necessary). It is therefore easier to acquire word identification in an alphabetic language with transparent spelling such as Spanish and German than a language with a more opaque spelling system such as English or, to a lesser extent, French.

It must be said that many teachers, particularly those of alphabetic languages, have a poor metalinguistic knowledge of the language they teach. This necessarily hinders a phonological approach (explaining their greater focus on the comprehension of texts, which they believe they can carry out more successfully. The importance of good teacher training should therefore be pointed out).

When a phonological approach is used for a language with a high degree of irregular phoneme/grapheme correspondence, such as English, it is difficult to choose the vocabulary which will serve as the initial learning base. The best balance seems to be found with the "frequency-regularity" pair. However, the texts, which should be well chosen or well compiled specifically for the reading exercise, must remain natural, so as not to obscure the representation of the real written language.

* The advantage of observation of phonological (and not phonemic) and semantic indices in languages with ideogrammatic representation. In Chinese Mandarin, for example, the identification of characters partly depends on the number of phonological neighbours. In addition, for everybody, phonological representations are required in the working memory, after the words or characters have been identified, for the interpretation of the sentence.

* The need, when learning a written language that is not the transcription of the mother-tongue or language of instruction, to work on oral expression (or reading aloud) before and during the formal learning of the written form. Use of the mother-tongue at the same time should not be rejected.

Reading and writing go together: in order to focus on real autonomy when learning to write, it is necessary to develop consolidation activities (trial-and-error writing production) and analysis activities (trial-and-error reading reception).

**Learning to understand**

Whatever the language, comprehension of the written language is not innate. One has to "learn to understand" writing in order to read well.

* First of all, we would stress the need for this learning to take place through interaction between the child, the class and his/her teacher: it is the "communicative" dimension of learning. The teacher does not tell the children the meaning of the text – s/he lets them discover it for themselves; the learner must express what s/he understands of the text and discuss this with other readers and the teacher, who guides them. "Questioning the text" is an enjoyable way of entering into the world of meaning.

* Then we would recall that in order to learn to understand, the child must be subjected to several texts, of different types (versatility).

* Lastly, we would state that it is preferable to start work on comprehension of the written language very early, even before being introduced to – or mastering – word recognition, through texts read orally by an adult or another child who already knows how to read. These texts, chosen for young children, will be the basis of discussions through which children observe and experience
the world around them. A little later children will practise comprehension of texts they can decipher by themselves, that have been chosen or specially written for this purpose.

Learning to understand requires numerous activities for discovering and extending vocabulary, enabling children to name the concrete world and express the universe of abstract and virtual concepts. The child's vocabulary therefore has to be increased, by introducing them to lexical, semantic and notional fields.

To understand a written text, children also need to familiarize themselves with the structural, morphological and syntactical elements of the sentence and/or the organization of signs in their environment. Knowledge of these written structure indicators will allow the reader both to respect the exact meaning chosen by the author and to integrate his/her personal knowledge and generate, in turn, an original, precise meaning (this is another form of the autonomy of reading).

In order to understand a text, finally, a reader has to have been shown how to perceive what the text states explicitly and what it suggest implicitly; how it builds meaning by introducing coherent elements of information, which give a different perspective on the world. The reader therefore needs to study, at least, what is inferred; reference to characters and objects; chronology and development of actions; and to be aware of the temporal and spatial presentation of facts and history.

To understand text, readers need to work on "texts", as each new reading experience enriches the reader by association with the other texts read previously. Reading versatility will be extended by learning to understand texts of different kinds, noting the characteristics of textual structure and the linguistic markers of their presentation (narration, documentaries, notices, and descriptive, poetic, and injunctive texts, for example).

**Discovering the culture of writing**

First, each young child should be sufficiently informed of the implications of learning to read, why it is worth doing and how important it is, before even starting. They need to be motivated when they start to read, and have a plan.

Secondly, children only take to reading if they can situate its text in its cultural context, in relation to other texts. Children must be introduced to, and frequently exposed to, the literary cultural heritage, and the writings of contemporary authors. In this way, children can gradually identify with the texts and can detect and accept the diversity of writings in their own and other languages. It is a factor in children's knowledge and understanding of the world, and in their open-mindedness and tolerance.

Thirdly, sharing the world of books and texts is a way of avoiding reading being – artificially – seen as an activity confined to school and the classroom, with no practical application in everyday life. On the contrary, the activities of reading and writing should be present – and used – in everyday life.

If these three components are all incorporated in a child's learning programme, the child's encounter with the written word will be a more successful one.

As regards the new technologies, in particular the use of the Internet and comprehension of electronic texts, while a large amount of research is being carried out, the results do not yet allow us to propose particular methodologies or make specific teaching recommendations. With regard to the use of educational software for the purposes of learning to read (Rouet & Germain, 2005), it would appear that the tools proposed are still very empirical or limited to a particular dimension of learning. Nothing allows us to say at present, that a tool exists that definitely helps with learning to read.
The spiral effect of reading/teaching to read

Learners have to enter into what we might call the *spiral effect of reading*: reading better – reading a lot – enjoying reading (Germain, 2003, 2005).

**Reading better**: through governmental educational or school structures, or in associative structures or accompanied schemes and programmes, each learner must be offered repeated and regular opportunities for learning to read, with specifically adapted and programmed activities. Thanks to a well chosen method, their reading must get "better and better", in other words with increasing ease and efficiency, enabling them to read more and more, with greater enjoyment.

**Reading a lot**: first through oral readings by an expert reader, then through regular frequentation of books and writing, children must be encouraged to read more and more often and for longer periods at a time. Regular exposure to the written word will make it more intimate and more familiar. Reading speed will increase, and the identification of signs or graphemes will be made easier. Reading endurance will develop, which is necessary for those able to stay at school longer. Reading a lot leads to better reading and provides the opportunity for children to come across texts they like, increasing their motivation to read.

**Finding satisfaction in reading, or enjoying reading**: when we read, we enter into the text with a reading objective: reading to .... Reading satisfies us if we can realize our goal: managing to find our way, to make an object work, find the information we need, discover a world we like. Satisfaction can be of a functional, aesthetic or emotional kind. Children need to be taught to read by turning their motivation to good account and instilling in them the desire to read and write. Then, they will read a lot, and therefore, will read better.

Thus, as their reading improves, children will read a lot, will experience satisfaction, which in turn encourages them to read more, thereby improving their reading, and so forth. This spiral effect, once it starts during the learning process, enables children to reach a threshold of irreversibility of reading.

The problem, in teaching the written language, is to get the spiral to start, using motivating activities which focus on the three learning components at the same time (developing automatism, enabling comprehension, reading books and texts frequently). One could, moreover, conclude that learning to read is long and difficult, with children having to make an effort. It would not be realistic to contradict this. This makes teaching children to read on a large scale, on the one hand, and teaching each individual, on the other, even more hazardous and complex.

**Conclusion**

We will conclude by stressing the importance of high-quality training for teachers and educators. All recent research on the effectiveness of education systems converge towards the same conclusion: a significant rise in the degree of expertise of teachers in the area of learning to read is the one thing that could reverse the current trend of increasing illiteracy. The majority of education systems in emerging countries have reached a budget ceiling that cannot be exceeded. Poor initial and ongoing training in these countries cannot, therefore, be remedied by an increased number of trainers and courses. Setting up face-to-face training systems would be both very costly and lack coherence. Only an on-line training course could provide a real chance of training teachers and educators so that they make judicious choices regarding teaching methods and practices. In our view, emerging countries need: creation of a distance training tool combining a common base of theoretical knowledge; a body of educational responses; a corpus of activity sheets; a video data
base of model sequences; and a distance tutoring scheme. Teaching methods and means cannot be improved unless it is ensured that initial and ongoing training of teachers and educators is of an excellent standard, thereby granting teachers the level of professionalism they deserve.
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Language policy


Pupils' performance and reading methods


**Word recognition**


### Comprehension


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