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## J. M. Morton, B.A.

# AN ASSESSMENT OF AN AUDIO-VISUAL FRENCH READING COURSE FOR USE IN THE PRTMARY SCHOOL 

M.Ed. Thesis, 1973

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# An assessment of an audio-visual French reading course 

## for use in the primary school

M.Ed. Thesis 1973, by J. M. Morton, B.A.

Abstract

Prior to the work carried out in 1968 by the author of this thesis, a French reading course for use in the primary school had been designed in the Department of Education at Durham University and given a small-scale trial. This thesis describes the work carried out in assessing the use of the course in a larger number of primary classes under as near as possible normal conditions.

Part I of the thesis describes the background to the experiment: the rapid growth of primary French teaching in the sixties, the basic need for oral competence, and the problems expected in introducing reading.

In Part II of the thesis the designing and initial trial of the reading course is described. After it had been established that the introduction of French reading did cause problems, an audio-visual reading course was designed which used a partly look-and-say, partly phonetic method. At the same time tests were designed which were to indicate how successful the course was. The course was taught to two primary classes in 1967 by a research student and the results, compared to a grammar school control group, were promising. Part III of the thesis describes the preparations made for a larger-scale assessment of the material using firstly a group of eight primary school classes taught by their usual teachers, and then in the following year a smaller group of five similar classes. The make-up of the sample and the running of the assessment programme are described.

In Part IV the results of the experiment are given, and reasons suggested for the lower level of success achieved. The results of the five-class group are examined separately. Part IV concludes with a consideration of some of the linguistic problems brought to light.

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PART 1
A CURRICULUM DEVELOPS

Chapter 1.<br>The Growth of French Teaching<br>In The Primary School

French, now a fairly well-established item in the time-table of a large number of primary schools in this country, has since its first introduction into schools of this type sometime in the early sixties inevitably caused many problems to those furthering its cause as a primary school subject. These problems have been caused by the nature of the subject itself, the nature of primary school teaching, the age of the children and the abilities of the teachers, to mention but some of the more important factors. As well as causing problems, the introduction of French into a new teaching environment has brought new opportunities, above all, as will be shown later in this thesis, for the reconsideration of old methods and the development of new ones. At the same time it so happened that the teaching of French began to enter the primary schools at a moment when the development of new testing methods in languages would make it possible to evaluate the results of such teaching with a greater precision than would have been possible previously.

It was in 1956 that the Ministry of Education published Pamphlet No. 29, entitled Modern Languages, in which it was acknowledged that foreign languages could be taught in the primary school. Whilst quoting the opinion that children under 11 might not be ready to learn a foreign language, it goes on cautiously to say (page 4) that there may
be advantages to be gained from doing so, given a good teacher exploiting the strong powers of imitation of pupils under 11 taught in a small group. The Ministry gave further cautious support, in its book Primary Education published in 1959, to the idea that abler primary pupils might benefit from being taught French, but doubted on the whole whether many schools would have the skilled staff and facilities necessary. Thus in spite of growing political and economic pressures for an earlier introduction of language teaching, combined With examples set by countries in Western Europe and North America during the fifties, it was not until 1961 that the first important steps were taken in this country. Among a small number of experimental schemes started that year with the support of the Nuffield Foundation, the most outstanding was the first "Leeds Experiment", in which a bi-lingual French teacher gave a small class of fairly bright children intensive instruction in French in the summer term following (1.)
their eleven-plus examination. By the end of the term, the children were being given instruction through the medium of French in a range of standard primary school subjects. Although the experiment could obviously not be the basis for a general curriculum change in primary schools, it did spark of'f great interest. A second Leeds experiment in the following year involved three English teachers who were specially trained and who achieved competent results in the slightly different circumstances. Several other local authorities started. schemes of their own.

Even larger than the number of schools involved in such official schemes were the number of schools and of individual class teachers who were beginning, or had already commenced, ad hoc oourses of their own devising, and often of dubious value. The number of these increased
fairly rapidly in the early sixties, and when in 1962 the results of the Leeds experiment started to emerge, the increase quickened. In the following year the Nuffield Foundation organized a survey of French teaching in British primary schools. ${ }^{(2 .)}$ They found that in the first three months of 1963 there were some 280 schools teaching French. Ninety of these were visited, and of the 150 classes seen 90 were judged to be below a desirable standard in terms of results and of teaching. Meanwhile, teachers in secondary schools which drew on these French-teaching primary schools were coming to similar conclusions as a few well-taught, and rather more badly-taught, pupils entered their first forms alongside pupils with no French at all. Before the results of the Nuffield survey were published, the Department of Education, which had become anxious about the spread of ill-considered schemes, instituted discussions with the Nuffield Foundation, as a result of which the decision was announced in March, 1963 to set up a pilot scheme to teach French in a limited number of primary schools. The aims of such a scheme had already been carefully considered by both the Ministry and the Foundation. One aim, in view of the low quality of much existing primary French teaching would be to establish the highest possible standard of instruction, allowing for the fact that the teaching would be carried out in many cases by non-specialist staff. There were also certain specific problems connected with primary French in which the Ministry was particularly interested, and these were eventually formulated in the following questions:-

1. Is any substantial gain in mastery of a foreign language achieved by beginning to teach it at eight instead of eleven?
2. Do other aspects of educational and general intellectual development gain or suffer from the introduction of a foreign language in the primary school?
3. What are the organizational, teaching and other problems posed by such an experiment?
4. Are there levels of ability below which the teaching of a foreign language is of dubious value?
5. What methods, incentives and motivations are most effective in fostering learning of a foreign language?

The pilot scheme and its methods of assessment would be designed in particular to give answers to these questions. (Some aspects of questions 1. and 4. were also relevant to the research project carried out in the Department of Education at the University of Durham, as will be shown later).

Certain general problems were foreseen from the very beginning and to cope with these the Ministry decided to establish a set of basic principles. The key problem was the ability of the teacher. It was expected that the average teacher involved in the scheme would probably be neither very fluent in French, nor qualified in that language beyond " 0 " level. Therefore, a thorough training scheme,
largely aimed at improving knowledge of and fluency in French, would have to be undertaken by every teacher wishing to take part in the Sheme. Possibly next in importance was a decision on the right age at which pupils should start learning French. Several articles and papers had recently been written on this particular subject (3.) and both theoretical and practical considerations (i.e. connected with the day-to-day running of the scheme) were weighed before the decision was taken to make eight years the starting age. It had already been decided that the scheme should continue into the first two years of the secondary school, so the third principle established that there should be no break in continuity at 11 , so that the children might pass as smoothly as possible into the secondary school. A fourth principle concerned the training of secondary teachers. Finally, it was recognised that new teaching methods had been gaining ground in many primary schools, based on a child-centred approach and discovery methods. Inevitably, it seemed, French would not always fit neatly into such an approach, since the imparting of linguistic skills in a foreign language seems to demand a very careful and centrally controlled presentation of the linguistic material. However, certain steps would be taken to ensure that the introduction of French would not disrupt the integrated type of timetable common in many classrooms.

Having established aims and principles, the Ministry and the Nuffield Foundation agreed on a division of functions, such that the Ministry would look after the administration of the scheme, while the Foundation would prepare teaching materials. At about this time, a third body, the National Foundation for Educational Research, was also called in; its task would be to devise and administer tests
that would supply answers to the questions given above. The job of administration, initially undertaken by the Ministry and later handed over to the Schools Council, involved the establishment of the scheme and the supervision and extension of its work. As far as the establishment of the scheme was concerned, this largely involved selecting suitable pilot areas on the one hand, and, on the other, training the teachers taking part in accordance with the first basic principle of the scheme, (see above). The Ministry approached all local authorities in its search for suitable areas and was rewarded with a remarkably enthusiastic response. Over half of the authorities were willing to take part in the work one way or another. As a result, 13 areas in various parts of the country were selected (the original intention had been to select about nine) as being about the right size (i.e. about 450 children per year in each area) and reasonably compact (i.e. the children would be going on to a fairly limited number of secondary schools). The training of the teachers followed shortly afterwards. It was decided in the circumstances that too much training would be better than too little and in view of the need for linguistic proficiency it was the linguistic side of the training that would be most stressed. The training therefore began with a language laboratory course organized in each area and varying in duration from area to area. This was followed by a three-month intensive course at either Besancon or Paris, involving inevitably much contact with everyday French language and life, but also including a regular language laboratory and conversation session, usually daily. On returning to
this country the teachers were given the final part of their training, which was in teaching methods. These method courses, run by HIII's, involved discussion of the sort of methods suitable for teaching French in a modern primary school, made teachers familiar with the audio-visual courses available to them and discussed a variety of practical problems. On completing this very thorough training programme, the teachers returned to their schools and the project got under way.

Those areas which had shown an interest in joining the pilot scheme but which had not been selected as pilot areas were offered a separate arrangement in 1964. This was to make them associated areas. Each associated area would work in the same way as a pilot area, but would not be used directly in the assessments. As far as possible they would adhere to the principles laid down at the beginning by the Ministry, and they would also benefit from the various training schemes that had been made available to the teachers in the pilot areas. (In the event, and partly as an experiment, some of the three-month intensive courses were held in England). In fact, some 53 areas associated themselves with the scheme, so that by 1965 between five and ten percent of the age group were learning French in the pilot and associated areas.

Meanwhile, another major section of the scheme, the Nuffield Foreign Languages Teaching Materials Project, had been set up in Leeds to devise, among other things, a French course suitable for the new teaching situation. In devising such a course there were two facets of the pilot scheme situation which had to be borne in mind
and which influenced the shaping of the material. The first was the comparative lack of experience on the part of the teachers as French speakers. The second was the new spirit of teaching in the primary school, where the activity methods played a great role. To meet the first problem, teaching material would have to give as much help as possible to the teacher, both in the shaping of the lesson and in the presentation of a good model of spoken French - for example by means of taped material. In the case of the second problem, much material would have to be included that would lend itself to active use, such as playlets, games and figurines. One of the first activities of the Nuffield Project was to make and publish a review of already existing audio-visual courses thought suitable by them or others for primary children. Even at that early stage, their bibliography included sixteen such courses, but few of them seemed entirely suited to the pilot scheme situation. Obviously the materials that the Project itself was developing would have to be tried out stage by stage as they were devised, and therefore schools in the pilot areas were given the option of using the trial material free of charge, in return for sending back reports on it at intervals. (Other reports would be coming back from Inspectors acting in liaison with the scheme). In the event about $80 \%$ of the schools chose to use the Nuffield material, and of the others the majority chose Bonjour Line, a course originally produced in France to teach French to the children of expatriates stationed in France. Other courses were also used, but to a much lesser extent. The third body involved in the scheme, the National Foundation for

Educational Research, was in the meantime devising a variety of tests to use on the children in the pilot scheme. These tests were very full and complete, and covered not only general intelligence and every major aspect of learning French (including listening, understanding, repeating, reading and writing) but also a study of the children's attitude towards their new subject. Attitudes of school staff were also measured. Children in the first three years of the experiment were given these tests, and reports on the findings were published in 1967 and 1971.

So much for the pilot scheme. French teaching in the primary school was, however, by no means confined to the pilot and associated areas in the sixties. Indeed, the introduction of the pilot scheme merely gave a further impetus to the growth of French teaching in individual schools. When the kinistry made its first approaches to authorities in connection with the pilot scheme in 1963, some replied that they would be starting projects of their own, and of these a certain number developed along lines similar to those suggested by the Ministry. The tendency since then has been for authorities to improve their schemes to bring them more into line with the standards set by the pilot scheme. There has also been a steady growth in the number of schools teaching the subject, so that by 1969 an estimated $25 \%$ of primary schools were teaching French. This figure had risen to about $35 \%$ in 1972. (4.) The Committee on Research and Development in Modern Languages, reporting in 1968, said: "Monifestly, what is happening in the primary schools is of crucial importance. If it proves wise and practicable to include the teaching of a foreign
language in the curriculum of all primary schools, a new foundation will exist for the learning of foreign languages in this country."(5.) The development of primary school French teaching during the sixties could be summed up as follows. On the one hand there was a gradual increase in the number of schools and later of authorities starting schemes of their own, influenced by a number of outside stimuli. At the same time the pilot scheme, itself one of the main stimuli, provided a source of good teaching standards and methods, which has also led to the establishing of a corps of well-trained teachers and the production of much good teaching material. As a result of this methodical approach, a variety of new problems were seen more clearly than they would otherwise have been, and a start was made on solving some of them. ${ }^{(6 .)}$

## Notes to Chapter 1.

(1) Kellerman, M. Two Experiments on Language Teaching in Primary Schools in Leeds. Nuffield. 1964.
(2) Lazaro, C. M. Report on Foreign Language teaching in British Primary Schools, January - March, 1963. Nuffield Foundation. October, 1963.
(3) These articles included those by T. Anderson, H. H. Stern and Harding (see bibliography).
(4) Department of Education and Science. Modern Language Teaching Today. Reports on Education, No. 75, November, 1972.
(5) Committee on Research and Development in Modern Languages. First Report, H.M.S.0., 1968. Page 3.
(6) For a full account of the progress of Primary French Teaching in the sixties, reference should be made to the books whose numbers in the bibliography are 3, 4, 5, 23, 26, 31, 32, 33, 34, 35 and 38.

## Chapter 2. <br> Problems of the Oral Approach

The first problem of teaching method to confront those involved in introducing French into the primary school curriculum was that of instilling into the children competence in speaking the language. This seemed to be the main aim of any primary French project, with reading and writing to be secondary skills, both in importance and in chronological order. The sequence of teaching, in other words, was to be for the children to hear, understand, speak; and finally read and write.

That this was to be the main aim and the correct order was indeed generelly accepted by most linguistic educationalists in the sixties. The theories that had led them to this conclusion had been laid down at the turn of the century by a number of linguists and improved and added to since then. In developing these theories in the early days, much weight was given to observations of the way a young child picks up its own language. For a while indeed some people were misled into believing that a second language could be picked up in the same way, that is to say, by the child listening to and slowly coming to understand the foreign language spoken in the same completely uncontrolled conditions as the mother-tongue. However, it was realised very early on that there were major differences between the situation of the inf'ant learner and that of the young person learning a second language: namely, that the infant has a linguistic blank sheet, a receptive brain and three or four years full-time learning at his disposal, whereas the young person has premconceived notions about language from his mother-tongue, a brain that is becoming slowly
more analytical, and a very limited period each day, or even week, to devote to the new language. As Corder writes: "It is precisely because we cannot reproduce the situation of mother-tongue learning in all or even most of its aspects when teaching second languages to older children or adults that we have a second language problem at all". (1.)

For this reason it was pointed out at an early stage, and constantly reiterated, that only certain basic principles could be deduced from examining the way a young child learns its mother-tongue. Of these basic principles perhaps the most important is the one already mentioned above, of the natural order of language learning. The young child first listens to and then repeats speech sounds from his mother-tongue, which he hears constantly around him, and his comprehension of these sounds grows at the same time. He does not come on to reading for a long time afterwards, for the ability to read, and hence to write, depends on the existence of a firm foundation of speech. This notion, so obvious to linguists now, is, all the same, a difficult one for many members of a highly literate society, as is shown by the occasional misuse of the word "language", especially by very literate people, to mean "written language". However, as Cole states: "there is little doubt among neurologists and physiologists that reading and writing with understanding presuppose a knowledge of the spoken word." (2.)

As well. as providing new thoughts on the order of language learning, the study of the may a young child learns its mother-tongue showed a second important principle: that is, the nature of the interaction
between the learner and the language. This is summed up very well by Cole: ".... from the viewpoint of the younger child, words and actions are interwoven ...."(3.) Learning a language is a process of establishing a subconscious connection between an object or action and a series of sounds. A young child, experimenting with the sound "Ma" is steered by its mother, through encouragement and repetition of the sound, to associate it with her presence and eventually with her. Later on, he discovers that when he is frustrated in a course of action by a grown-up the sound "No" often accompanies the restraining arm, and after a time the sound becomes almost as effective as the action. Eventually he will come to use the word in the same way, and indeed is often more dependent on its magic force than the more powerful grown-up. As he grows older, in the pre-school years, he will accompany quite complex activities with long-running commentaries. Speech then is an immediate vocal reaction to a situation by the speaker, producing immediate understanding on the part of a listener, who may be led by it to give a response himself, either verbal or active. As a result of these discoveries a number of language teachers set out to achieve similar results in the foreign language with their pupils. The aim was to enable the pupils to use the foreign language both in speech and in writing with something approaching the confidence and spontaneity associated with the mother-tongue. The need was to bring about an immediate association between actions or objects on the one hand, and the sounds of the foreign language on the other. The method which eventually evolved over a period of years sought to do this in a controlled manner, by first instilling oral competence into the
pupils and then going on to the secondary skills of reading and writing. Before going on to consider the extra complications which were introduced when modern language teaching spread to primary schools, a brief description of the method as practised in secondary schools will be useful, since the primary method is, in essence, an extension of this. A typical unit of lessons would follow something like the following lines. In the first lesson the teachers will start by creating a situation and then fitting the appropriate French words to it (the assumption from now on is that French is the foreign language in question). For example, if he is teaching the present tense of the verb "regarder", he wrill take an object whose French description is known, e.g. a book, and looking at it he will say "Je regarde le livre". He will make clear, by gesture and situation rather than by explanation in English, that he is looking at the book, rather than holding or reading it. He will then do the same with one or two other objects, e.g. la table, les fenêtres until the sense of the sentences becomes clear to the children.

Having perhaps run through the sentences once again himself, he may then hold a book in front of them and ask "Qu'est-ce que vous regardez?" Even if this is the first verb they have come across, they will know that they are being asked a question from his intonation, and above all, from his expression, and the whole context of the action and his own previous examples will make the meaning clear to them. Some of the brighter ones will volunteer the answer they have heard from the teacher: "Je regarde le livre". He will then run through with them the other examples he has used. After that he will introduce other
objects, partly to give the lesson variety, and partly to ensure that they can alter the answer in the correct way each time. Once he is sure that the "je" form of the verb has been assimilated correctly, he will no doubt go on to introduce the other forms of the verb, both singular and plural, using the same sort of situation as a starting point each time. Thus he will introduce the "il" form by pointing to a member of the class: "Il regarde le livre". Then in reply to the question "Qu'est-ce qu'il regarde?" he will get his original statement back as an answer. By means of such simple examples, and above all, by the pupils actually using the new forms in this rather stylised conversation, a certain amount of oral proficiency is obtained. Normally at this stage, with a grammar school class, it would be safe for the new material to be consolidated by writing it on the board, to confirm visually what the children had learnt orally. In the case of this verb the teacher will eventually have to introduce the fact that the "tu" and "ils" forms have silent endings (-s and -nt) in the written form. For this reason, more oral practice than normal may be required before showing the class the words in writing. Certainly the teacher will be well advised to mix up the various questions - je, tu, vous, ils, il, nous - to make sure that the children really can distinguish the various forms orally. The main point remains, then, that the more important oral skill is established as a meaningful unit in the child's mind before the subsidiary skills of reading and writing are introduced. At this stage a teacher using a text book course will no doubt go on, once the oral work is firmly established, to read the set reading passage for the particular lesson and to
follow up with the oral and written exercises provided.
There is obviously a limit to the variety of oral presentation of linguistic material for even the most versatile and choreographic of teachers, limited as he must be for the most part to the classroom situation. But before the growth of primary school teaching, another development had taken place on the technical side which considerably simplified the task of the oral-method teacher. This was the development of the audio-visual type of course. Following much the same theories as the straight oral method, the A.V. (audio-visual) course greatly extends the range of situations that can be presented in the classroom. Basically the A.V. course consists of a number of incidents which are presented visually to the pupils by means of a series of slides while the associated French conversation is played on a tape. Since a vast number of real situations, from simple greetings through to fairly involved stories, can be presented by this means, it is obviously a very suitable instrument for the first two or three years of a course, though it is perhaps less effective for dealing with non-present situations - e.g. the future tense.

A fairly standard pattern of instruction has been evolved for the A.V. course. (4.) Usually the children will watch the sequence of slides for the particular lesson through once, listening at the same time to the related conversation on the tape. The tape and slides will normally tell some simple story often involving two or more children with whom the pupils can identify. The teacher will then run through the slides again, making sure, by discussion rather than translation, that the pupils know what the story is about. They will then listen once again
to each phrase on the tape and repeat it, watching at the same time the slide that goes with it. By this means they come to associate the words with the situation in which they are spoken, and hence gather the words' meaning. They also practise their pronunciation of the French phrases. When the children are familiar with the text, they should be able to supply the relevant phrase on being shown any of the frames of the film strip. Then come various forms of consolidation, including questions in French and re-enacting the scene in class. At the end of this process the French phrases and expressions should have become firmly established in the child's mind, by the same associative method as his English vocabulary was established earlier in his life. Finally, the children must be given some opportunity to use the French material in their own situation. Depending on the age of the children, and the amount of French already learnt, this could involve a sketch of their own, question and answer work on situations familiar to them, and so on. This could take up a week's lessons, perhaps more, and would replace not only the teacher's presentation of new material in the oral method simple, but also the reading passage. In the secondary school it could, and after the first term normally would, lead on to exercises involving reading and writing.

One major benefit of this audio-visual method, especially for the Primary school, is the elimination of written presentation of grammar, which became more and more necessary under the other method as the teacher ran out of actable situations. In the secondary school this was not so serious a defect as in the primary school; in the former, written material is introduced fairly early in the course with no
major disadvantages; in the latter, it seemed unwise to introduce reading and writing for some considerable time after the children began to learn the language. (This problem of timing, as it affects the introduction of reading, is dealt with in the next chapter.) The audio-visual method, with its variety of stories in film-strip form and the dialogue provided on tape, enables the teacher to teach the children solely the aural-oral skills and habits without having to introduce written symbols; in fact, these symbols need not be introduced for a very long time, perhaps even the first two-and-a-half to three years.

The plan of a basic A.V. lesson described above is applicable then both to the secondery and to the primary school. Because of its largely oral approach this type of method is ideally suited for starting French teaching with Junior pupils, and it is the basis of most primary courses, including the two mentioned in Chapter 1. - the Nuffield course, and Bonjour Line. However, within the primary school context certain extensions of the method became essential and none more so than the increase in physical activity involved. Young children learn best through activity, and this insight is applied nowadays to many subjects taught in the primary school. There are good reasons why it should also apply to second language learning. Cole's comment on the interrelation of language and action in the experience of a small child has already been quoted; moreover, a child of eight or nine is very unwilling to sit still and accept passively the lesson that is being taught. Therefore, a much longer
time can be spent on such useful activities as carrying out orders given by the teacher ("Ouvre la porte!"); searching out objects and figurines ("Ou est le chat?" - child's answer: "Le voici"); touching objects, part of the body etc. ("Touchez le pupitre". - child's answer: "Je touche le pupitre".) In fact the Nuffield course that was developed originally for the pilot scheme and later published as En Avant contains a large amount of material which can be used in this way and also suggestions for games and other class activities, which, although simple, contain much useful linguistic material. The teaching ability needed to cope with such a varied course is obviously great. "Experience has shown that teaching by the audio-visual method is an exacting process, demanding considerable skill on the part of the teacher". (5.) It is on the other hand an extremely worthwhile exercise, especially if it allows the child to achieve two main aims: "an oral competence developed from accurate listening and understanding" and "a lack of inhibition and readiness to talk in simple situations". (6.) As Cole says: "If we believe that language is primarily speech and that writing is a secondary aspect which issues from speech, then oral work should form the substance of the majority of the week's lessons throughout most of the primary school course: reading and writing will generally not be introduced until the children have a firm grounding in the spoken language." (7.)

## Notes to Chapter 2.

(1) Corder, S. P. The Visual Element in Language Teaching. Page 7.
(2) Cole, L. R. Teaching French to Juniors. Page 41.
(3) ibid, Page 58.
(4) See in particular Calvert, F. I., bibliography No. 6.
(5) Schools Council Working Paper No. 8, page iii.
(6) Mir. J. S. Jones H.M.I. speaking at Torquay conference, 1965; reported in Schools Council Working Paper No. 8, page 44.
(7) Cole, L. R. op. cit. page 42.

## Chapter 3. <br> The Problem of Reading

It has already been suggested that the skill of reading is secondary to hearing and speaking, and should only be taught when children have a fair grasp of these primary linguistic skills. The reasons for this have already been given in Chapter 2 and very simply amount to this: the spoken work is a symbolization of meaning, whereas the written forms are visual representations of the spoken mords and do not symbolize meaning in themselves. As Lado says: "Learning to speak and understand means learning the language, whereas reading and writing imply that the language is known and that we are learning a graphic representation of it." (1.) This obviously describes the process through which a person goes when learning first to speak and then to read his native tongue, and it may be best to approach the problem of teaching a child to read a foreign language by first considering two questions of which we have rather more experience: firstly, what reading means to an adult, reading his own language; and secondly, how he acquired this skill of reading as a child. It will then be possible to consider the teaching of reading in the second language in relation to these two questions.

Lado defines reading as follows:"to read is to grasp language patterns from their written representation."(2.) De Boer and Dallmann refer to reading as "an activity which involves comprehension and interpretation of ideas symbolized by written or printed language". (3.) These are factual definitions, but they do not fully cover the relationship of the mature reader to the printed word, a relationship
which is a peculiarly intimate one. One only has to walk down a city street for meanings to leap at one from posters and shop signs; to run one's eye along a bookshelf of titles starts messages in one's mind without any special effort on one's own part. This curiously close relationship is well described by A. S. Hayes in his introduction to the French level One Reading-Writing-Spelling Manual: "To the educated native, words and sentences on paper seem to speak from the page. He looks at a word, or scans a whole sentence, and in some way seems to hear it in his head. The very appearance of some printed words seems somehow appropriate to their meaning, despite the fact that there is actually no connection whatever." (4.) If the relationship between written symbols and meaning, via speech, is so close for the native reader, and if, as seems likely, this relationship is already established by the age of ten for the majority of children, then it can be surmised already that a problem may arise if a foreign reading system is to be introduced to children at about that age. In facing the problem some help may be obtained in trying to find out how children do establish this relationship to print, in other words, how they learn to read in their native tongue. In fact this is not as easy as one might have hoped. The process is a many-sided one, which is still only partially understood. In his significantly titled book, "How DO Children Learn to Read?", A. R. Hackinnon states: "Coming to see how letters are parts of words which in turn make up sentences, is a mental feat as complex as anything which the reader is going to attempt in the whole of his literate life."(5.) It is in fact easier to describe how a child is taught to read than how he or she learns to do so. Since this may in
any case throw some light on the main problem, it will be useful here to examine the normal teaching method in one form or other in most British infant and junior schools.

The approach to reading English begins between the ages of five and six when the children first enter the infants school. It is unusual however for the children to be plunged straight into reading. It is generally agreed that children have to have reached a certain level of maturity - physical, mental and emotional - before they can embark successfully on reading, and therefore the children will spend some time on "reading readiness" work. "Reading readiness" is admitted by most experts on the subject to be a rather vague concept, but the sort of work that can be done with the children to help them towards reading readiness is very practical. It includes eye-training work looking at pictures, using picture symbols to indicate which desk belongs to a particular child; it includes work to extend a child's linguistic ability - drama work, talking about pictures the child has drawn; and it should include work to broaden his experiences. Beyond this an early start can be made in introducing the child to books, ensuring that the class has a good open library of interesting books (mainly picture books at this stage) and telling the children stories. The next stage is the introduction to print and to the idea that written words mean something. This is done by a number of means. The teacher will write the child's own title under the child's drawing, and then read it to him. Certain things may be written in a class news-sheet. Notices will appear: "The shop is open", "The weather is "_ with the correct description filled in daily by the teacher,
with a card that may contain not only the word "sunny" for example, but also a drawing of the sun. Many children will be beginning to recognise the written shapes of words from the frequency with which they are pointed to and read out by the teacher, but they will still not be reading.

Now they are ready for the main stage in learning to read. Pictures and sentences from the first reader will appear round the classroom, ideally one sentence to a picture. The teacher will point the pictures out to the children, will talk about them and read the sentence. The children will "read" the sentence back, in other words they will look at the sentence and repeat what the teacher has said. This is a very simple procedure but it is the crux of the whole method at this stage. Firstly there is a picture that the children find worth talking about. Then there is a written sentence for the children to look at. Thirdly, while they are looking at it the teacher reads it to them so that they hear it and can repeat it. In this way they come to associate three things: the meaning, which they obtain from the spoken word and the picture; the sound of the spoken words themselves; and the shape of the written words. After a little practice this association will be strong enough in their minds for them to be able to "read" the written words under the pictures without having to hear the teacher read them first. They will then be able to move on to the book itself, their first book, and read it with a confidence that will encourage them to make more progress in reading.

The essence of this method is that the children can look at a whole phrase or sentence and then say it as a whole, without having to fit
individual letters together. This is the "look-and-say" method and it has one great advantage: from the very beginning it is a meaningful, thought-getting process. Obviously in the early stages it bears little resemblance to what an adult does when he reads. The child is relying largely on the pictures and the order of the story as it has impressed itself on his receptive memory; in as far as he is relying on the printed words at all, it is most likely that he is recognizing them by their general outline, or "configuration" - thus he sees fon as 4 . A good course will encourage the child to rely more on the print, to concentrate on precise differences and to recognise individual letter shapes as clues to word identification. It will do this by first getting the child to recognise individual words within the sentence. The vocabulary of the first reader will be limited so that the same common words occur again and again: "Here is John." - "Here is Janet." - "John is in the garden." - "Janet is in the garden". The child will then be made aware of the shapes of letters, especially in similar words which he may confuse; for example this and the have a similar configuration and are interchangeable in some sentences, but the child will soon distinguish the shape of is from the shape of e. The pointing out of these differences must be an active process by the teacher; as the child advances through the series of readers, and as his reading vocabulary grows, he will often guess his way through difficulties, unless he is made to focus his attention on the printed shapes. This is particularly important since it is at this stage that the retina is having to develop new skills in interpreting and identifying the shapes of letters, as is pointed out by Dolch (6.).

For some time, then, the child is reading words as a Chinese reads his ideograms - that is by associating one complete word-shape with one spoken word-sound. As his reading vocabulary grows he will become, and need to become, more aware of the letter shapes within the words as well as the general shape of the word itself. Once this stage has been reached, the child is introduced to the idea that these letters represent the individual sounds within the word. This is the second break-through he has to make if he is to read by himself, for without a training in phonics he will not be able to work out the sound, and hence the meaning of new words that he has not met before in print. This process involves not only visual skills but aural skills as well. The child must be able to hear the different sounds from which the word is made. This is easy enough with vowels and continuous consonants such as $m, \underline{n}, \underline{l}, \underline{s}$, whose sound can be extended indefinitely so that the child can concentrate on it. A problem arises, however, with the plosives, such as $b, \underline{p}, \underline{d}, \underline{t}$, which cannot be extended and therefore have to be pronounced with a slight vowel sound. Initial problems arise when the child tries to put together, for example, the sounds "buh"-"a"-"tuh" to form the complete sound and word "bat". There are however several ways of getting the children past this problem if they cannot solve it for themselves, and most children in the mid-junior years can spell out quite difficult words for themselves. By this stage the child's reading ability should contain most of the essentials necessary for meaningful reading. Because of the early "look-and-say" method, the words should be speaking to the child from the page; they should be putting a meaning across to him as he reads
them just as the same words would have done if spoken. Indeed, Anderson and Dearborn state that: "the child may be said to have learned to read when he makes the physical, mental, and emotional responses to the printed word that he would make upon hearing the word spoken ..."(7.) This is the passive side of reading. Before $a$ child can do this completely, however, he must have taken the further step of seeing not only what words say but how they say; in other words how they are put together from individual letters. Diack states that: "in learning to read children are in fact learning to translate symbols of sound (letters)into blocks of sound that make sense." To do this they must fully understand what Diack calls the "meaning" of the individual letters, that is, the fact that each one represents a sound and that they can be combined together to form patterns of sound that have "word meanings."(8.)

What then has a child of eight or nine achieved through learning, and as a part of learning, to read its native language? On the physical side it has achieved a number of new skills, mostly connected with the retinal nerve of the eye, allowing the eye to analyse the complicated patterns it sees on the page. The child has discovered "what reading is about" and expects printed symbols to "make sense." It is able to comprehend fully written passages as long as the vocabulary is no more difficult than the vocabulary with which the child is aurally familiar. Finally it can analyse the wey words are put together and work out the pronunciation of newly met words from its knowledge of phonics, an ability which will become increasingly second nature to the more able child.

This brief description has covered most of the technical, mechanical, problems related to teaching a child to read, and since it is largely mechanical and technical problems that we will be concerned with when we come on to consider the teaching of reading in the foreign language we could well stop here. However, few experts would be satisfied with a course of instruction that merely taught children the mechanical skills of reading. Schonell makes the point as well as anyone when he says that: "any programme of instruction that does" not at some stage arouse in the children a desire to read by themselves must be deemed to have failed."(9.) There is no point in reading for its own sake; the purpose of reading is "to derive enjoyment and to obtain information" ${ }^{(10 .)}$ It is also "an important means of introducing the child to the surrounding world" (11.) It is therefore essential that every classroom should have an extensive library in which children can find suitable reading material; and by suitable is meant both the choice of vocabularyused and the content of the book. Reading, then, should be not only a skill but also a pleasure. Comparing the two problems of teaching mother-tongue reading and teaching second-language reading, it should now be possible to. see. both similarities and differences in the two situations which should give some guidance as to what methods might be appropriate and what methods might be inappropriate when introducing French reading into the primary school curriculum. The differences in the circumstances will be considered first. Firstly, and obviously, the children will be older. This is very important inasmuch as it will affect their method of learning.

Andersson draws a distinction between conditioned learning, very roughly the acquiring of habits (as in learning to read the mothertongue), which is the predominant method up to about the age of ten, and conceptual learning, the more or less conscious sorting out of ideas into concepts in one's mind, which is the type of learning found to be predominant from about ten onwards. ${ }^{(12)}$ One could say then that the earlier the children begin to read French the more the teaching can approximate to the teaching of mother-tongue reading. The later it takes place, the more the children will want to have explained to them, as is the case when teaching modern languages to a secondary child.

The age of ten is crucial in another way, in that some experts on reading have suggested that a reading age of about ten may be the level necessary if a child is to be able to develop his reading by himself and deal with normal written communication as in newspapers, books etc. This view is put by Schonell: "It would seem that once we can bring pupils to a reading age of between nine and ten years, this degree of achievenent is sufficient to enable them to carry on with reading outside school."(13.) It may be then that if the reading of French is introduced too early it may only confuse some children whose reading of English is not yet fully established. (A similar argument was of course advanced against the early introduction of oral French teaching.) The second main difference between English reading and second language reading is that the children know, when they approach second language reading, what readingis about. When they see writing and print they know what it is and how it works. This at least they will not have to
learn again. Nor will they have to acquire again the fine adjustment of eye habits in the retina which enable them to identify the shapes in front of them. Similarly they have developed a skill in identifying sentences, words and parts of words as individual units, and this skill: too will stand them in good stead.

Connected with this "knowing what reading is about" there are a large number of other well-developed habits which are related specifically to the reading of English and which may deceive the child when he applies them, as he no doubt will, to French reading. The child brought no assumptions, no pre-conceived ideas, to the learning of English reading. He brings a number of such assumptions to the pattern of French words that he sees for the first time. The first assumption, bred of long experience of reading, is that what he sees will make sense. Supposing that the child has learnt oral French for a reasonable length of time, the French print in front of him may or may not make sense at first sight. If it does not then a second assumption will be made, namely that the words can be deciphered by the phonic method, and his by now consummate skill in the use of this method will be applied to the French words. Since many French spelling conventions are different from English ones, this also may or may not help him. If, as seems quite likely, he interprets a sentence such as "C'est un chat" as the meaningless sound sequence [sest an tfat] then his English reading habits are said to have "interfered" with his French reading performance, and the phenomenon is referred to as "interference".

Another difference is that the child now relates speech very closely
with writing. For a child learning to speak its mother-tongue the idea that words can exist in any other form just does not exist. For the child of nine or ten the spoken and the written forms of a word are probably equally important. Within a few years he will have reached a stage where the written form becomes almost more important; to hear a new word will cause him immediately to ask: "How is it spelt?" even if he does not immediately need to write it down. The attitude of the late primary school pupil will probably lie somewhere between that of the non-literate five-year old and the writing-conscious adolescent and adult. The final difference in the two situations relates to the teaching situation itself and specifically to the amount of time available for instruction in the two skills. MacKinnon estimated that "the minimum time spent by any one of the [infant school] teachers [in his research project] in helping the children to learn to read represented threefifths of the total time given to teaching."(14.) Obviously the children at that stage had a good deal more to learn, but even so it is a fact that the time available for teaching French reading will be a good deal less than this, in spite of the fact that learning to read French is learning a habit, and that at the age of nine or ten the children will find habit-learning progressively more difficult. Some of these differences are obviously an advantage to the French teacher. Among these can be counted the skills of eye and brain that can be put to good use, and the child's understanding of the reading process as such. The disadvantages might appear to be the limit on the amount of time available, and also the assumptions that
the child brings to French reading from his English reading experience. Experience in secondary schools has in fact shown that these assumptions do indeed cause severe cases of interference unless the child is reminded of the French pronunciation even before he sees the written words.

There are also some similarities between the two teaching situations, and from these a certain amount can be learnt. The first similarity is the concept of reading readiness. The list of factors vital for reading readiness and growth in reading in the mother-tongue include: physical health; mental health; sight and hearing; intelligence; background of experience; knowledge of language; desire to read; purpose for reading; interest in reading; and reading skills (15.) All of these are equally vital for the development of French reading, but perhaps the one that needs most consideration at the moment is knowledge of the language. If one introduces French reading to, say, a ten year old who started learning oral French at eight, then one is dealing with someone who has apparently two years experience of the language. These two years consist, however, of some $2 \frac{1}{2}$ hours a week of actual contact with spoken French, whereas a native starting reading in his own language at the age of five would have had tree to four years full-time conscious contact with his own language. There is, however, a limit to the delay in introducing French reading. Children who have already learnt to read English will no doubt be eager to read in French as well; also they are becoming more writingconscious as they grow older. From their own experience, Thomas and Leach state that "there is a danger that children who have merely
heard the language will tend, after a while, to consider its spelling as phonetic. The more venturesome children are sure to experiment on their own, and produce their own written language based on their aural knowledge."(16.) Such a development is bound to make their learning of the correct written forms more difficult.

The last three similarities are in fact three needs that relate directly to the training programme. The first need is that reading in French as in English should start as, and remain, a meaningful process, a "process of thoughtgetting" to quote De Boer. (17.) It is now some years since learning to read in English was synonymous with learning to decipher. It is not so long since the same was true for learning to read French in secondary schools, but there seems no reason to go back to this process of syllable-by-syllable decoding, especially if the first years have been spent instilling oral fluency into the children. It may be that some form of the look-and-say method may still be effective in the early stages of French reading. The second need slightly contradicts the first, but only apparently. However one introduces French reading at the beginning, one has at some stage to make the children aware that the letters and lettercombinations in French often have different values from the English spelling conventions. Whether the children find this out for themselves or whether they need to be instructed in it is dealt: with in the next chapter. The point remains that at some stage they must grasp the phonic structure of French spelling, just as they did in English.

Thirdly, they must be encouraged to read for themselves once they have
a firm command of reading ability. Reading in French can no more be justified as an academic exercise than can reading in English. This means that once reading skills have been achieved, the children must be provided with every opportunity to read French for themselves. Once again, as in English, the problem of suitable reading material arises; some publishers are beginning to make a small contribution in this field.

In this chapter we have tried to deduce from experience of native language reading instruction what problems may arise when teaching French reading to primary pupils with some command of oral French; and we have also examined the methods of teaching used in teaching reading in the native language in order to see whether any of these methods may still be valid when it comes to teaching the reading of a second language. It is clear that a large number of problems remain unanswered after such a theoretical examination, many of them of great practical importance to the teacher in the classroom. Faced with the need to introduce reading to their pupils at some stage, perhaps before they left primary school, many teachers were reaching pragmatic solutions of their ovn, aided by whatever schemes were provided by their particular course. It was in order to find out what was happening, and what could reasonably be undertaken in the primary school setting that the research project described in this thesis wes set up.

## Notes to Chapter 3.

(1) Lado, R. Language Teaching, A Scientific Approach. Page 131.
(2) ibid, page 132.
(3) De Boer and Dallmann. The Teaching of Reading. Page 17.
(4) Hayes, A. S. A - L.M. French Level One. Pages 1 - 2.
(5) MacKinnon, A. R. How do Children Learn to Read? Page 17.
(6) Dolch, E. W. The Psychology and Teaching of Reading. Page 129.
(7) Anderson and Dearborn. The Psychology and Teaching of Reading. Page 130.
(8) Diack, H. Reading and the Psychology of Perception. Page 134.
(9) Schonell, F. J. The Psychology and Teaching of Reading. Page 200.
(10) ibid, page 221.
(11) De Boer and Dallmann. op. cit. Page 7.
(12) Andersson, T. The Optimum age for Beginning the Study of Modern Languages.
(13) Schonell, op cit., page 229.
(14) MacKinnon, op. cit., page 86.
(15) DeBoer and Dalimann, op. cit., page 76.
(16) Thomas and Leach. Introducing French in a Primary School. Page 33.
(17) DeBoer and Dallmann, op. cit., page 22.

PART II

## STARTING THE EXPERIMENI

## Chapter 4.

## Preparatory Steps

In Chapter 3. we made several suggestions as to the sort of problems that may arise when introducing reading to primary school learners of French. It was suggested, for example, that interference from the child's English reading skills could well baffle him when he was first presented with a French text, and then betray him when he tried to analyse the sounds into words. Because of this, we suggested also that the child would need to be made aware, through active teaching, of the workings of French phonics. We pointed out that these suggestions were purely theoretical, and that teachers in the field may well have had different experiences.

In 1966, the Nuffield Primary French Project was two years old. Few state schools had any longer experience than this of teaching oral French to primary age pupils, and so this was probably one of the first years in which fairly large numbers of children were coming to the end of an extended primary course. (Indeed, the first "cohort" of Nuffield children mere not leaving primary school until 1967, at the end of a three year course.) Where a primary course had lasted more than one year, it had often happened that a certain amount of reading had already been introduced before the child left primary school. It was about this time, therefore, that primary teachers began to comment on their experiences in introducing French reading
and one particular group of assertions aroused interest in the Department of Education at the University of Durham. Some teachers were stating, in fact, that their pupils were having little difficulty in transfering from purely oral French to reading the language. Aided by the syntactical context of some of the more easily recognisable words, pupils were able, it was claimed, to read out aloud sentences and passages in French, as long as the material was already familiar to them in spoken form. This seemed to contradict not only the theories mentioned above, but also experience gained from secondary schools where, even after an oral beginning, some instruction in French spelling conventions was usually necessary. It was therefore decided to investigate the situation, and, to this end, the research project described in this thesis was set up in the Department of Education at Durham University. The first task was to examine the claims of the primary school teachers. A series of simple tests was designed to show in a general way whether these claims were true or not. The tests were also structured so as to show in more detail which particular elements of French spelling, if any, were causing most difficulty. It was decided to carry these tests out on a small scale, and so two classes were chosen, both of which had been learning French entirely orally for more than a year. They had both used Bonjour Line and both classes had passed Unit 10. The tests were therefore based on these first ten units. Of the classes, one was mixed and the other consisted entirely of girls. As the first step towards the constructing of the tests, the first ten units of Bonjour Line were analysed for structure, vocabulary
and phonetic content. When this had been done, three tests were devised which were constructed solely from material obtained in the analysis. The tests were progressively more difficult, but at no time did they contain any material which would be unknown to the children. The tests were designed to be used in a language laboratory. The children were brought into the Department for the tests, and were accompanied by their teacher. The tests were explained and administered by a research assistant.

The first test tested whether each child could read out aloud onto its tape a series of short sentences. Thirty-five sentences were flashed, one by one, onto a screen. After each one had been exposed for a short period, the children were given a signal to read it onto their tape, all beginning at the same time. The sentences were nearly all taken straight from Bonjour Line as they occurred in the text; two had been constructed by joining together complete phrases found in the course. In selecting the sentences the research assistant had attempted to include as great a range of known material as possible, and also most of the suspected orthographical problems. This test obviously came very close to the situation that the teachers themselves had tried out, apart from the presence of the research assistant and the testing equipment. Each tape was scored by three different assessors, to obtain a fairly objective result, and the child was given one point for each sentence read completely correctly. The results, out of 35 , are set out below. The last two columns indicate the number of sentences which the whole class read wrongly and correctly respectively.

| Class | Children | Maximum <br> Possible | Average | Range | All <br> wrong | All <br> right |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 30 | 35 | 11.0 | $2-23$ | 3 | 0 |
| B | 35 | 35 | 3.7 | $0-12$ | 7 | 0 |

On the basis of these results, one can certainly say that a problem exists. No child read more than 23 sentences correctly, out of 35 . No sentence was easy enough for all the class to get it correct, whereas three sentences defeated all of Class A and seven defeated all of Class B. In Class B no less than twelve scored zero on this test. Many children, indeed, made no attempt at some of the more difficult sentences. The results of this first test were in fact analysed more closely, but before looking at this further analysis, we will deal with the second test.

The second test was designed to test comprehension of a written sentence. The children had in front of them a group of six French sentences. Three slides were then shown on the screen one after another, and the children had to write 1,2 and 3 opposite the sentences that seemed to suit the slides best. Then another group of six sentences were considered, and three more slides shown, and this process was repeated twelve times in all. This meant that 36 slides were shown giving a maximum score of 36 sentences correctly identified. Once again all the sentences, including the incorrect ones, were taken from units of Bonjour Line as were the slides themselves. The correct sentences were, in fact exactly the same as the 35 used in the first test, with one added, However, a long period of time separated the two tests, so that there is little likelihood of invalidation. The results, out of 36 , are set out below:-

| Class | Children |  | Maximum possible | Average | Range |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 32 | 36 | 18.9 | $11-32$ |  |
| B | 42 | 36 | 13.9 | $4-29$ |  |

These results are somewhat better than those on Test 1. However, neither test justifies the conclusion that primary ohildren can progress from oral French work to reading French without instruction and guidance of some kind. In view of this, the third test, which was to have been a more difficult version of Test 1 , was abandoned. The results of these tests, and the reports of the teachers, are obviously at variance with one another. The reasons for this were not investigated, but possible explanations should at least be suggested. The least satisfactory, since it can only be speculation, is that the teachers themselves concentrated mainly on their better pupils, and thus obtained biased results. To do so is, of course, a temptation for any teacher, but this possibility should probably be ruled out. One real difference between the two situations, however, is that the children were tested without being able to draw help from their neighbours, whereas, in class, the weaker ones would have been helped by hearing correct answers from the better ones. Another difference, which is only partly speculation, is the possibility of a difference in standards. For the first test one word wrong in a four word sentence means no mark. In class, three words correct out of four would have been a praiseworthy achierement. This is well illustrated by Class $A^{\prime}$ s response to the sentence: C'est mauvais, c'est salé. Only two children read this completely correctly, whereas nearly half the class read it correctly apart from the last word. In fact, it is probably this difference in approach which is one of the main reasons for the different conclusions being drawn by class teachers and research workers. For the class teacher, this trying out of her pupils on French reading was part of an on-going process of
teaching in which mistakes were naturally made and corrected. Hence the occasional mistake would not have stood out particularly. For the tester the situation was more like a still photograph, which he could examine at leisure. The situation was altered also by the use of the language laboratory: in the classroom, the teacher could hear only a chorused answer, or one individual; the research assistant could listen to each child's individual response.

Far more useful than this mere quantitative analysis of mistakes by a very small sample, was the contribution made by the tests towards the analysis of specific problems in French reading. The results of Test 1 in particular were examined to discover what spellings and sounds were causing trouble and why. As a first step, each grapheme was examined individually. Two discoveries were made. Firstly, even when considering the same grapheme, some considerable variations were found from one word to another. Thus more children pronounced the grapheme /a/ correctly in "Michel appelle son frere" than in "c'est salé". Obviously the context and familiarity of vocabulary helped more in one case than in another. Secondly, it was discovered that allowing for such internal variation some twenty graphemes had caused more difficulty than others. A list of these is given below. It was suspected that interference from English spelling conventions had caused a good deal of the problem and this hypothesis was tested. Inspecting the consonants, it was found quite quickly that the largest number of mistaken pronunciations of ch, ille, $j$ and qu were identical with the English interpretation of these graphemes, and could be ascribed to interference. With the vowels, some preliminary work had
to be done in sorting out the English conventions which, for vowels, are somewhat complicated. It was discovered that about $55 \%$ of the errors could be ascribed to interference; the other $45 \%$ must, therefore, be interpreted as simple confusion on the part of the pupils, who perhaps realised that an English pronunciation was incorrect, but could not find the correct French one. Interference from the English spelling can certainly be said to play a large role in causing errors in French reading at this stage. The graphemes identified as being particularly troublesome were the four consonantal graphemes: $\mathrm{ch}_{\mathbf{2}}$ ill.le, $\mathbf{j}$ and qu, mentioned previously, plus the vowels: a, ai, au, e, eu, i, ieu, oi, ou, $\underline{u}$, ui, ei, an, en, on, eau.

Apart from the interference, other causes of error were identified. The first of these was difficulty in reproducing a French sound. These caused some difficulty for the assessors, especially the graphemes u_and ai. It was difficult to decide whether the pronunciations such as [3ei] for j'ai and [du] or [dju]for du were caused by interference (say from wait, jute,' duty) or whether they were incorrect attempts at the proper French pronunciation [3e] and [dy]. Nasals caused pronunciation difficulties too. A word like grand pronounced as English "grand" -[grand] was obviously a misreading. Occasionally, however, the nasal vowel was given but followed by the $\underline{n}:[g r a ̈ n d]$. Another problem was the tendenciy to weaken a full vowel to a schwa $[\theta]$ in certain positions, for example assises [ $\partial \mathrm{Si}: 2$ ] and achète $\left[\theta \int \varepsilon t\right]$ corresponding to English "about", "ago" etc. There was also the serious problem of silent endings especially the
plural endings ("-es", "-ent") which were often pronounced. Finally there were certain graphemes which just did not occur in English and where little help seemed to come from the context. Among these are especially the combination eau, accented vowels (particularly é) and §.

The overall situation as revealed by both tests can be summarized as follows. Presented with French writing for the first time, without any special preparation on the part of the teacher, primary children with a background of about four terms' oral French are unlikely to be able to cope fully with all the problems involved. Given a visual clue, they will probably understand between a third and a half of the material with which they are presented - possibly more if the material is in the form of a story which, in the test, it was not. Left to interpret written sentences into spoken sounds without any help at all, the children's performance is worse than this, with the success rate dropping to between ten and thirty percent. It seems unlikely that their comprehension in this case will be as high as in the other test, since they must depend on the sounds for the meaning. In interpreting the sounds from the written symbols, the children face problems on four fronts: where a grapheme in French represents a different sound to that suggested to an English reader (straight interfence); where a graphic form does not occur in English any way; where the child is having difficulty in distinguishing between the French sounds themselves (e.g. the different nasals); and where the silent inflexional endings occur.

It was obvious from these results that teachers would need to apply some form of controlled reading instruction when transfering their
children from purely oral work to French reading for the first time. Such a course would need to do several things. Obviously, it would have to cover the specific problems revealed by the tests and especially it would need to make the children aware of the different French sounds represented by familiar-looking spelling conventions. On the other hand, it would have to resist the temptation of becoming a course in sound deciphering, for this would neglect the main aim in reading, that of obtaining information. The course should encourage the pupils to go on reading, and to give them confidence in reading, French. Nor should the timing be ignored; reading should be begun only when the children are ready for it. Bearing these points in mind, the research assistant examined the options available to the teacher. Excluding the possibility of the teacher devising some course of instruction herself - not an easy task at the best of times - there remained two possibilities, provided within the context of the two major courses in use at the time, the Nuffield Course and Bonjour Line. Each was examined in turn.

The Nuffield Course introduces reading at the beginning of Stage 2.
This has already been preceded by Stages $1 A$ and $1 B$ containing together forty weekly units which will take up, together, somewhat longer than the first year-and-a-term of the child's primary French. The reading material consists of sentences taken from the taped passage for the particular unit. Normally about $70 \%-80 \%$ of the material is selected for reading. Each sentence for reading is printed on a long narrow card, with the sentence's reference number
also printed on it. When the children have spent sufficient time on the oral section of the lesson, the written sentences are introduced. For each situation in the taped story, the Nuffield course provides a printed colour poster. The first relevant picture is displayed, and the first sentence-card is shown. The tape is played, the children hear the sentence and then they "read" it from the card; in other words they repeat the sentence whilst looking at the card. The same procedure is adopted for all. the following sentences, changing the picture poster when necessary and displaying each sentence as it is being spoken on the tape for the children to "read" it afterwards. The sentences are then shown again, but without the tape or pictures. As the children have covered the story orelly, they should have no difficulty in reading the sentences. The third stage is to present the sentences in random order, perhaps with the posters if necessary. By this stage, individual reading will be happening as well as choral reading. Finally, the whole procedure is run through again, with tape and pictures as a final consolidation. It is suggested that the children could then copy and/or illustrate a particular sentence. As far as possible, the Nuffield Course limits the number of words presented for reading in order to obtain maximum exposure of a small number of important words. Thus, in Unit 1 of Stage 2, the running total of words is 32 , but these 32 are put together from only eleven different individual words. Similarly, the first five units, as a whole, are 217 words long, but they are constructed from only 97 individual words. The actual choice of words is largely determined by the wider needs of the course, although Unit 1 is deliberately
written to provide a very suitable first reading passage of the format:-
Bonjour, les enfants.
Je m'appelle .........
J'ai .................ans.

This is repeated four times, with the names Georges, Nicole, Xavier and Brigitte, and the ages dix, sept, onze and neuf. In subsequent units, the need to provide suitable material for the on-going oral side of the course becomes more important again, and the only selection of words for reading is made by excluding unsuitable sentences. This Nuffield reading scheme obviously meets several of the criteria set out above. Because it largely reproduces the oral passages, the reading always remains a meaningful activity. Because of this it will also be able to retain the childrens interest. By selecting only a proportion of the material in each unit for reading, a certain control is kept over the material that could be unsuitable for this purpose. The method, through the simultaneous presentation of picture, sound and writing makes it easier for the children to establish the vital links between sound, meaning and written symbols which they must build up if reading is to make sense. For the purposes of the research project, however, there was one missing element, and this was the explicit teaching of individual graphemes. With the choice of words determined by other factors than the needs of the reading course - as was suggested in the last paragraph - it was obviously impossible to control the appearance of individual graphemes. For example in unit 1 , the two distinct nasal sounds $\underline{o}$ (on) and $\underset{\underline{a}}{(e n, ~ a n) ~ b o t h ~ a p p e a r . ~ A n ~ e x a m i n a t i o n ~}$ of the first five units shows that all the graphemes make largely random
appearances. For this reason it was felt that the Nuffield Course did not fully meet the requirements of this particular research project. Bonjour Line also introduces reading at the beginning of the second part. The first part of Bonjour Line, containing 25 units, normally lasts about a year, according to the authors. The structure of any given chapter (leģon) of Bonjour $L_{\text {ine }}$ is the same for part two as it was for part one. There are two film strips, of which the first shows an incident in the life of a French family, usually a self-sontained, short story, accompanied by the necessary dialogue on tape. This is treated as a normal audio-visual course, as described in Chapter 2. The second strip, the "jeudes questions", always takes the form of a conversation between the puppet, "Line", and her cartoon teacher. This strip gives the class a chance to practise in a slightly more formal sense, some of the material contained in the situation of the first film-strip. It is in this "jeu des questions" that reading is introduced in Part 2 of the course. The cartoon teacher first asks Line (and thus the real class as well) to repeat a number of sentences, based loosely on the text of the main story. When this has been done, (and the real teacher is sure that the real children know the sentences almost by heart), the words then appear on the screen, and the children listen while "Line" reads them. The children then read them themselves, and should not be put off by the spelling as they have already learnt the words by heart. The real teacher then writes certain key-words on the board and underlines the graphemes to show how the sounds fit together. Finally he makes a list of other words known to the children which contain the same sounds spelt in the same way. The passages for reading relate directly to the story-film, and therefore
have a meaning for the children. They do not normally reproduce the whole story, and they are usually very short passages. Thils, in the first six lessons, the longest passage of reading is nine sentences long, and contains only 37 words. A fairly typical passage is that from lesson 6:-

La nuit a passé.
Tout le monde a dormi dans la grande maison.
Il fait jour.
Pierre regarde la carte.
Bonjour Line does have a planned approach to the problem of teaching individual grapheme-phoneme correspondences. As shown above, the teacher is expected to analyse the words in the reading passages for sound patterns and then to build up groups of sentences containing the same sound. In fact, the course goes further than this, and lays down a lesson-by-lesson timetable for introducing the various graphemes. Within the first ten lessons the aim is to introduce most of the regular phoneme-grapheme correspondences. For the individual lessonsthe course foresees the following:-

1. Certain vowels and consonants.
2. Nasal vowels, ou.
3. 6, o, ch.
4. br, tr, pr.
5. oi.
6. $\mathrm{z} / \mathrm{s}$, ai.
7. $c, ~ ¢, ~ e a u, ~ a n, ~ e ̂, ~ e ̀ . ~$
8. oin.
9. eu, ge.
10. eur, en, fl, bl, pl.

This planned approach to phonetic problems obviously comes much closer to the needs of the research project, and, indeed, about a half to a third of the difficult graphemes identified by the project are to be found in this list. However, there are certain aspects of the Bonjour Line course which do not fit the demands of the project so well. A glance at the list above will show quite a number of graphemes which clearly do not need to be included for Anglophone children; these include all of the graphemes of Chapter 4. (br, tr, pr) plus fl, bl and possibly, $z / s$ and 0 . (Bonjour Line was, of course, written for children with a variety of linguistic backgrounds; the authors could obviously not design the course to suit any one language community.) Even where suitable graphemes are involved, the shortness of the texts makes it impossible to include a large number of each. For example, examination of the reading text of lesson 6 (see above) shows only two examples of ai (maison, fait) and two of $s / z$ differentiation (maison, passé). These will not, by themselves, create a great impression on the child's mind, and are merely starting points for blackboard work. The shortness of the reading passages, though ideal in some ways, has a further drawback, in that it is impossible to make them as interesting as the original, much longer story. For these reasons, it was felt that Bonjour line was also not entirely suitable for the purposes of the project. I'wo things stood out with both courses. The first one was that they had to face a problem in combining the two aims of providing both oral and reading instruction. The introduction to Bonjour Line Part II., sets out the problem as follows: "d'une part, poursuivre les progrès déjà accomplis dans l'apprentissage de la langue parlée, et ceci à
partir de situations précises traduites en images, et, d'autre part, convertir ces phrases entendues et pronofées en phrases écrites qui obéissent à des lois qui leur sont propres." Both courses realised that material for reading had to be orally familiar to the children, but, at the same time, the passages designed for oral work often contained unsuitable elements for reading practice. This they tried to overcome by a process of selection from the oral material, a selection which was either very drastic, as in Bonjour Line, or only very slight, as in the Nuffield Course, but which, in both cases, only partially solved the problem.

The second thing that stood out was connected with timing. It would obviously be very difficult for a teacher to introduce a full course of reading instruction any earlier than the beginning of Part II, unless she herself undertook a good deal of preparatory work. Now, it is true that, under ideal conditions, the first part of these two courses can be completed in about a year, and, in these circumstances, the beginning of the second year would be soon enough to introduce reading, using the method and material supplied by the particular course. However, in practice, it has been found that Part I of both courses, but especially of Bonjour Line, often takes longer than a year to complete, and in these circumstances the introduction of reading might well be postponed for an undesirable length of time, with the children forming their own convenience spellings on English patterns. $O_{\text {ne }}$ solution to all these problems would obviously be a separate short course solely to introduce reading. It was felt that such a course would have three advantages. Firstly, it would not be tied to the rate of progress made in the oral course, but could be introduced whenever
the teacher felt that her pupils were ready for it. Secondly, it would be able specifically to tackle those identified problems which an Anglophone child has when faced with written French, without being limited in its choice of material over much by the exigences of the oral course. Thirdly, it would be able to fit around these specific problems a series of texts which would be inherently interesting and which would encourage the children to make progress in reading. Because a course of this nature would only supplement, rather than replace, the existing courses, and because it would in itself provide a further opportunity of studying in greater detail the problems of French reading, it was decided that to produce such a course would be worthwhile and a start was made in doing so.

## Chapter 5. <br> The Course

The design of the reading course was carried out by the research assistant who had undertaken the tests described in the last chapter. His work in preparing and writing the course is described and assessed as it appeared in its original form. It was, in fact, modified slightly, as described in Chapter 7., before being tested in school conditions, but these modifications were minor and affected only certain aspects of presentation.

Before work could start in designing the course, basic questions had to be answered. The first of these was: at what stage in the French teaching process should reading be introduced? Theories concerning timing were discussed in Chapter 3., and, because of some of the considerations mentioned there - the continuing receptiveness of children under the age of ten, and the danger of children making up their own spellings - it was decided that it would be wrong to leave the introduction of reading as late as the end of the second year of French studies. On the other hand, it was thought that at the end of only one year the children's knowledge of French would not be sufficient to cope with the whole new field of reading. Apart from anything else, their vocabulary would probably still be too limited to provide sufficient examples of the problem spellings. The period of four terms to one-and-a-half years was therefore arrived at as a theoretically suitable period before starting reading. The second question was: how would the reading course relate to the two main primary French courses in use? It was decided that the
reading course would in no way try to usurp the oral-teaching function of these. two courses, thus falling into the trap of doing two things at once. On the contrary, the reading course should be a supplement to the main courses, and should base itself on the oral ability attained by children using either of the two main courses in use at the time - Bonjour Line or the Nuffield Course.

The third question was: what should be the order of presentation in the course? This question required more detailed thought. According to Lado (Language Teaching, page 137) the central core of teaching a child to read a foreign language after an oral beginning must be the establishment of a habit; the habit of "grasping the language patterns from their written representation quickly without analysis of what symbols make what sounds." On the other hand, one of the main aims of this course was to make the children aware of the fact that certain symbols did not make the same sounds in French as they did in English; in other words, it was intended that at some stage the pupils should indeed analyse the symbols in front of them. This meant once again reaching a balance between some sort of habit - establishing look-andsay method, and the analytical phonic method. The relationship between these two methods in second language reading instruction was discussed in Cmapter 3., and the theories suggested there formed the basis for the decisions taken with respect to the course. Firstly, it was thought wise that each chapter, section or unit of the course should contain an initial period of look-and-say work in order to establish in the child's mind an habitual and meaningful relationship with the shapes of French words. Secondly, it was decided that this
look-and-say period should be followed fairly quickly in the same chapter or unit by phonic analysis of the main problems found in the chapter or unit, since many of the more able children would become aware of some of these even during the look-and-say section. There was a second facet to the order-of-presentation question. The "problems found in the chapter or unit" referred to at the end of the last paragraph would consist largely of the problem graphemes isolated by the tests. It would obviously not be wise to expect the pupils to cope with all twenty or so of these graphemes at once, and, therefore, it was decided to "teach" a limited number of graphemes in each unit, and thus to spread the load evenly over the whole course. The last question to be settled was: what methods could be used to present the course? As shown in Chapter 3., the crucial point of a look-and-say method in the mother-tongue is when the child looks at a page of writing and a picture and hears the teacher read the words. By a slow process of conditioning, the shape of the words come to produce the same response in the learner's mind as do sounds of the words. The essential elements of this process are a bringing together of three elements: the old stimulus of the spoken word, the new stimulus of the mritten word and the old response to the spoken word, so that the old response and the new stimulus can be associated in the learner's mind. (1.) Obviously this conditioning process can be applied, in outline, to someone who has learnt French by an oral method, but there are difficulties. For one thing, the child can already interpret the letters for himself and, as shown by the texts, will probably do so incorrectly. One way around this is to make him expect
a particular group of sounds already before he sees the written form, or as Goodman, K. S. has pointed out, "what the language user perceives is only partly what he sees or hears and partly what he expects to see or hear."(2.) If, for example, one showed a pupil a picture and repeated a French sentence describing the picture, he would soon associate sound with picture. If one then showed him the picture again, the sound of the sentence would come to mind, and if one also showed him the written form of the sentence at the same time, he would assume that the written shapes represented the same sounds as the French sentence. He might then go on to test this assumption by a closer examination of the words, and as long as there was a sufficient correspondence between shape and sound (in terms of English spelling) he would probably ignore the discrepancies and "read" the French sentence correctly. One obvious way of doing this would be to give the child a standard audio-visual lesson, with film strip and tape; to make him familiar with the spoken sounds; then, when the words were reasonable well known, to play the tape and show the slides again, but, this time, with the relevant section of text sub-titled onto each slide. This would establish a connection not only between sound and writing but also between writing and meaning as well, with the picture providing the meaning. This, very roughly, was the procedure decided upon, although the eventual form was slightly longer than this and is described later in the chapter. This method would obviously involve the use of three sets of slides with the same tape: one, as in an ordinary audio-visual course, showing the pictures only; a second, shoving pictures and words;
and a third showing the words alone. By this means the visual stimulus would slowly be withdrawn, leaving the written words as the new stimulus and thus the new habit of French reading would be established. Having laid down these basic principles, the next task which faced the research assistant was the selection and ordering of the teaching material. Selection had to procede on two fronts: firstly, what graphemes to select for special treatment, and, secondly, what vocabulary to include in the texts of the course. On the first foount, guidance came mainly from the test results. These had suggested that the following list of graphemes needed to be taught carefully to the pupils: ch, ille, gn, j, a, ai, au, an, e, eu, ei, en, $i$, ien, oi, ou, on, $u$, ui and eau. This list was altered slightly omitting ei, ui and gn, which did not occur frequently enough to justify special treatment in an introductory course, and including c and 9 , a pair which could cause some difficulty, and 0 , which had not caused too many problems in the tests, but which justified its inclusion first as a primary vowel and secondly as a member of the eau/au/o group. This first list includes most of the problems isolated by the tests, and, in particular, it includes: graphemes liable to interference; graphemes not found in English; and graphemes that presented special pronunciation or differentiation difficulties for Anglophone children. The problem of silent inflexional endings was included originally but was later considered too complex for detailed treatment at this stage and therefore no great emphasis was placed on it.

The second part of the selection process involved slightly more work. Selection of vocabulary from which to construct the texts for the
course meant, in accordance with the principles already laid down, selecting vocabulary which was known to the children and this in turn involved examining the two main courses. Four terms oral French had been fixed as a minimum background for starting reading, and after consultation with teachers it was felt that one could safely expect most classes to have covered the first fifteen lessons of either course within this period. These fifteen lessons were therefore closely analysed and for each course two lists were drawn up which showed (a) the vocabulary and (b) the grammatical structures that were taught within the lessons. As far as possible the text would be constructed from material that was common to both Bonjour Line and Nuffield. This was not always possible and occasionally it was necessary to include material that was familiar to one group but not to the other, and very occasionally some material that was completely new to both groups. There were several reasons for this. Because the Nuffield course is very carefully graded, it was necessary to include some grammatical forms which would not have been encountered by Unit 15 of Nuffield Stage 1. For the most part these new forms were different only in their written form from forms already covered in Nuffield and during the oral presentation would present no more problems for the Nuffield children than for the Bonjour Line pupils. Again, simply in order to construct interesting texts, it would be necessary to include words that were only found in one course. A further reason concerns the presentation of graphemes. It was obviously desirable to include a large number of examples of each of the twenty special graphemes, and
yet in some cases there simply were not enough examples of the particular grapheme common to both courses. An outstanding example is the grapheme $u[y]$ which was found in only three words common to both courses: une, tu, and sur. Obviously in such cases, other words found only in one course or the other, would have to be included.

The task now facing the research assistant was to combine this material in such a way that it would meet two criteria: first, that the passages constructed should be interesting in themselves to primary age pupils, presenting realistic situations that were conducive to re-enacting and other normal audio-visual follow-up work; and, secondly, that each should contain sufficient examples of the two or three graphemes to be given particular attention in that unit of the course. The story not only had to be interesting, but also easy to illustrate since it was intended that each text should form the basis of an introductory audio-visual lesson, and it was essential that the slides should add to and not detract from the meaning of the main text. Whether the texts were inherently interesting could only be finally decided when they were presented to pupils and this is discussed later in the thesis. The full texts are in Appendix A, page 215.

The graphemes themselves were introduced gradually, as far as possible, throughout the whole course in order to prevent confusion and to enable the children to concentrate on one problem at a time. It was decided that nine lessons or units would be sufficient to cover the twenty graphemes and that each unit would present one, two or three graphemes
for special consideration, as follows:-

| 1. | A | $\xi$ | CH |
| :---: | :---: | :---: | :---: |
| 2. | I |  |  |
| 3. | 0 | AI | EAU |
| 4. | OU | EU |  |
| 5. | E | OI |  |
| 6. | ON | U |  |
| 7. | AU | J |  |
| 8. | EN | IN | ILLE |
| 9. | AN | IEN |  |

This layout is, in fact, fairly carefully graded, both as concerns the grouping of the graphemes and their order. Positive grouping brings together $/ \mathrm{g} \%$ and / oh/ as a contrasting pair, both containing the letter c , but representing two clearly distinct sounds. In unit three, the pairing of / / and /eau/both representing the sound [0] is also useful, since in the majority of common words /eau/ normally appears only in the final open syllable (château, traineau etc.) whereas / / would normally appear anywhere but in this final position. Finally, the two groups of nasals, $O N$ and $A N / E N$, which to English ears sound so similar, have been split up for the purpose of first presentation. As far as the order of presentation goes, this has, to a certain extent, been subordinated to the grouping process just described. As far as possible, the most common graphemes are presented early on, and the less common onces are kept until the end, although this was not always possible as revealed by Table l"; below. (This table shows the number of examples of each grapheme appearing in each unit. The numbers in

Table |
(This shows the number of examples of each grapheme per Unit)

| Graphemes | Presented in Unit | UN IT |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 1 | (17) | 16 | 14 | 10 | 10 | 11 | 5 | 19 | 7 |
| CH | 1 | (4) | 6 | 2 | 3 | 2 | 4 | 11 | 5 | 4 |
| c | 1 | (3) | 3 | 1 | 0 | 0 | 0 | 1 | 1 | 2 |
| I | 2 | 4 | (15) | 9 | 10 | 5 | 3 | 5 | 2 | 1 |
| 0 | 3 | 1 | 2 | (8) | 6 | 6 | 1 | 3 | 5 | 2 |
| AI | 3 | 1 | 0 | (8) | 1 | 2 | 3 | 1 | 4 | 4 |
| EAU | 3 | 1 | 0 | (5) | 4 | 7 | 1 | 0 | 4 | 3 |
| OU | 4 | 2 | 4 | 0 | (12) | 9 | 0 | 5 | 3 | 3 |
| EU | 4 | 0 | 2 | 0 | (8) | 2 | 5 | 5 | 5 | 1 |
| E | 5 | 0 | 0 | 0 | 3 | (9) | 1 | 1 | 1 | 0 |
| OI | 5 | 2 | 1 | 0. | 3 | (15) | 8 | 4 | 7 | 8 |
| ON | 6 | 3 | 4 | 4 | 6 | 4 | (23) | 6 | 2 | 8 |
| U | 6 | 2 | 4 | 7 | 2 | 3 | (13) | 6 | 2 | 4 |
| AU | 7 | 0 | 1 | 0 | 2 | 1 | 1 | (15) | 0 | 5 |
| J | 7 | 4 | 4 | 3 | 6 | 3 | 0 | (14) | 3 | 2 |
| EN | 8 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | (11) | 3 |
| IN | 8 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | (8) | 3 |
| ILLE | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | (7) | 0 |
| AN | 9 | 0 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | (14) |
| IEN | 9 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | (11) |

rings show the number of examples of a grapheme in the unit in which it is given particular treatment.) It can be seen from the table that the graphemes $J, U$, and $O N$ are all common and could well have been introduced sooner, whereas the introduction of $\mathcal{\xi}$ could well have been postponed. One obvious advantage of introducing common graphemes early, as far as this was possible, is that one can only thus limit the appearance of other less common graphemes until the unit in which they are due for their special treatment. This is indicated in Table 1 by the large number of zeros to the left of and below the ringed numbers. Another point worth noting is the heavy concentration of examples of a grapheme in the unit in which it is taught, and quite often in the following unit as well. This will give a teacher plenty of material to draw on in any particular unit, and will also make a certain amount of follow-up work possible in the subsequent unit. Running one's eye down the columns, one will also note that the special graphemes for a given unit are, as far as possible, the most common graphemes in that unit. The manner of presentation of the material has already been briefly described, but will be now given in more detail. Following the writing of the text, a series of slides was prepared, with the help of an artist, which would provide the visual part of the course. Each text was broken up into sections and large coloured drawings were made to illustrate each section. Examination of the texts will show that their average length was about one hundred words. For illustration they were split up into about twenty sections, giving an average of five words per picture. The drawings were photographed in order to
obtain colour slides. They were also photographed in black-and-white with sub-titles. In each case the sub-title gave the whole section of text that went with the slide. Some thought was given to the exact placing of the words on the slides, since it was important not to obscure the picture. In most cases the sub-title appeared at the bottom, but occasionally it appeared to one side, in a box rather than a strip. A third set of slides was prepared which showed the sub-titles only without the picture. Care was taken that the sub-titles appeared in exactly the same place on this set of slides as they had on the previous set. Finally, a fourth set was prepared, once again with sub-titles only but not in the same place on the frame. The design of both picture and writing was carefully considered before the slides were made, since they could either facilitate or hinder teaching. The pictures themselves were made as realistic as possible, without any tendency towards stylised drawing. This would help the children to associate themselves with the characters. The writing was kept as simple as possible, block printing sans serif. It was designed to be of a size easily readable in a normal class-room, so that given a five-foot high by eight-foot wide total image size ( 100 mm . lens at twenty-four foot) a capital "M", for example, would appear approximately four inches by three inches. (3.)

Tapes also had to be prepared. These were recorded from the passages by native speakers, and care was taken to ensure that they were clear and distinct. From the main tape, exploded versions were prepared, that is versions with pauses during which the pupils can repeat the preceding phrase. The dividing into phrases was identical with the
phrasing used for the sub-titles. The method intended to be used with these materials was as follows. Firstly the children see the colour slides flashed one by one onto the screen, synchronised with the relevant sections of the tape. On this first watching they simply listen, and attempt to understand. Since a very large proportion of the material will already be familiar, the next section, - the teacher and the children discussing what has happened in order to clarify the meaning - can probably be shortened a good deal. The children will then watch and listen again, and this time they will repeat each phrase. Normally they will then proceed to oral follow-up work, but this too can probably be curtailed somewhat. It was indeed considered undesirable that the children should know the text by heart, since this would make them rely less on the written symbols when these were eventually introduced. A certain amount of question-and-answer work, and limited amount of enactment of the same or a similar story probably is all that is necessary. In the next stage of the teaching process the children once again hear the tape, but the slides they now see are the black-and-white ones with sub-titles. The black-and-white picture is not likely to distract their attention from the written words as much as the coloured picture might have done, but the illustration is still there to provide a continuing link with meaning. After each phrase the children repeat, but now they have the written word in view as well. Finally they are shown the last series of the slides with the sub-titles alone, and they read them. By this time their knowledge of the story will help them through any difficulty of interpretation, and the tape
will be played after each phrase so that they can check their efforts. (A final check that they were using the written clue more than the memory of the story is easily achieved by showing the last set of slides again but in random order.)

What has been happening is that one set of stimuli has slowly been withdrawn, whilst a further set has slowly been introduced. In the first coloured presentation the stimuli were obviously the picture and the spoken French. The new stimulus of written French is introduced in the second stage, and the picture stimulus is made less attractive. By stage three the visual stimulus is withdrawn completely and even the spoken word is only there as a prop, not as a primary stimulus in itself. Because of the presentation of all three stimuli in stage two the necessary association between written material, speech, and meaning should have been established in the mind of the pupil.

This presentation on tape and film would provide the basis of the course from which the teacher would then move on to tackle the problem of individual graphemes. Work would obviously start with words contained in the course, and the most useful initial activity would be to generalise about one particular grapheme. This could be done by picking out words from the text which contain this sound, and pointing out the common factor to the children. Once the pupils were aware of the sound-spelling relationship, they could be introduced to other words, known orally but not contained in the text. In order to facilitate the teacher's task, a number of contrastive drills were also drawn up and included in the booklet accompanying the course.

These consisted of sentences for reading from the blackboard and containing specific contrasts, e.g. "Écoute, Michel t'appelle au tGléphone", is one of ten sentences to illustrate the effect of the acute accent; or "Les hommes ont mon chocolat", which is one of another set of ten to illustrate nasal and open "o" (4.) Finally, teazlegraph material was provided. This consisted of a felt sheet to which could be attached words from the course. Each word was printed on a strip of cartridge paper, which could be attached to the felt by means of "teazles" fixed to the back of each strip. The advantage of this method was that the words could be used by the children who would thus be able to "write" whole sentences, by putting together a series of words, without the danger of mis-spelling. It was realised that several questions remained in connection with the teaching material. How much presentation of the second stage of the tape/strip material would be necessary before the children were fully conversant with the written French forms? What sort of follow-up work was really possible, and how much of it would be effective? Would the course as a whole be as useful as it was hoped? In order to answer these questions one would have actually to test the material, in controlled conditions certainly, but in a classroom situation. The work involved in doing this is described in chapter 7. If such a trial was to produce meaningful results it would also be necessary to test, objectively, what was actually happening, and the next step in the project was, therefore, the preparation of suitable testing material.

## Notes to Chapter 5.

(1) Anderson and Dearborn. The Psychology and Teaching of Reading. Pages 139-144.
(2) Goodman, K. S. Psycholinguistic Universals in the Reading Process. Page 136.
(3) Reproductions (not to scale) of the three types of black-and-white slides will be found in Appendix A, page 269.
(4) These exercises will be found in Appendix A, page 225.

## Chapter 6.

The Tests

Writing about curriculum development generally, Stephen Wiseman, Director of N.F.E.R., stated in the preface to French from Eight that "it is essential ... to incorporate into the development programme as effective and as sensitive an evaluation system as can be devised."(1.) The form of any testing material devised for use with this particular course would largely be determined by two major factors, one external to the research project, and one internal to it. The first of these factors was the theory of testing, and, in particular, of linguistic testing, which was current at the time, and which would largely determine the method and overall plan of any tests; the second factor was the nature of the project itself, the contents of the course and the hypotheses which it was thought desirable to test. As far as the first factor is concerned, it may be said that theories of testing and assessing have advanced greatly since the beginning of this century, and eventually, especially in the last thirty years, these changes have begun to affect the field of language testing as well. The main elements of change have been the new theories of language and of language learning; the development of a psychological basis for testing generally; and the development of statistical methods for assessing both the intrinsic value of a given test and the specific results obtained from it at a given setting. Each of these elements will now be examined in turn.

New theories of language and of language learning have already been described in some detail in chapters one and two of this thesis and will not be covered again in great detail here. Their impact on
testing has remoulded thinking not only as to what we should test for, but also, to a certain extent, how we should test. These new theories have initially, of course, changed the method of teaching languages, but this in itself implies a change in the method of testing. If grammar - translation methods are no longer being used in teaching, then translation itself is no longer an acceptable form of test. If the oral side of language is being given greater prominence, then thought must be given to testing oral ability. If second language learning is seen as the acquiring of a set of habits, in the same way as first language learning is, then it is habits that must be tested at least as much as, if not more so than, conscious reasoning ability. All these changes in the theory of language have had their effect. A second factor has also played an important role, and that has been the development of new methods of language analysis. For many centuries language analysis consisted of two activities only: the preparation of dictionaries, showing what prords existed in a given language, and the compiling of grammars, describing how these words were normally put together, where "normally" meant really "normally in writing". New developments in the last sixty years have mainly focused on elements of language smaller than the word. To begin with there was a growing awareness of phonology, the individual sounds that make up words, and their method of production in the mouth. Following on from this came the concept of the phoneme, the smallest unit of sound which, if altered, can change a word's meaning. The differences between spoken and written language were also studied in greater depth, and new concepts of vocabulary and grammar were developed. All of these changes meant that a greater control and understanding
of a pupil's progress in language learning was possible. It also meant that where necessary these elements could be tested specifically, rather than part of a larger test calling on a large number of skills, phonological, lexical and grammatical. These advances on the linguistic front were paralleled by advances on the testing front, and especially in connection with the psychological theories of testing. One of the major break-throughs was the development of the so-called "objective" type of test, which began very early in this century with such experts as Binet. It had been realised that the whole business of testing and of examinations was extremely dubious because of the strongly subjectic element involved at every stage. When setting the test the examiner had to make subjective judgements as to the choice of items and as to their presentation. In answering the test the examinee was bound to make subjective decisions, outstandingly of course on an essay type question, but even to a certain extent when answering factual questions. Finally, the marking of the test would often be subjective, once again especially with essays, but not only here. The objective test was designed originally to remove one of these elements of subjectivity, namely at the marking stage. An item in an objective test takes the form of a question followed by a series of possible answers. The examinee has to indicate by ticking, underlining or some other method which answer he considers correct. The scorer now only has to decide whether the examinee has selected the correct answer or not and give him a mark or no mark accordingly. Obviously this sort of test will give slightly more reliable results
if used judiciously. Equally obviously, it cannot replace all forms of "subjective testing" and specifically it cannot easily test integrated skills, such as the ability to speak a language fluently, or to write a well argued essay - or, in this context, to read a passage easily and with understanding. In an attempt to minimise the elements of subjectivity left in an objective test, attention was focused on the design of such tests. Firstly it was realised that a careful and controlled analysis of the subject matter of the test could help in eliminating some of the vaguaries of the question-choice and such an analysis is now considered an essential first step before the construction of any scientifically based objective test. The next step was an attempt to draw up a series of rules which could guide test construction. These rules have been developed by psychologists and testers over a long period of time as a result of experience in the use of these tests, and they are well summarized in chapter seven of D. A. Viood's'book, Test Construction. The list of rules and hints which she presents there is too long to be repeated here. However, each element of an objective test item will be considered briefly. Firstly, there is the question itself. This should obviously be as brief, direct and intelligible as possible. This sounds obvious, but is sometimes not easy to achieve. Secondly there are the answers. A good guide to the construction of these is that the incorrect answers (distractors) should appear just as credible at first glance as the correct answer. There should be nothing in their form of presentation or in their wording which could give clues to the examinee as to which is the correct answer. Obviously
distractors should not be wildly different from the correct answer; they should not, if they are in a sentence form, be in a different style from the correct answer; they should not be merely negative versions of the correct answer. The correct answer should not draw attention to itself by undue elaboration of style or by greater length than the distractors. An ideal set of answers should make the examinee think carefully about each one, but allow him on the basis of his knowledge to arrive at the only correct answer. This development had made testing a more precise process. However, it was realised that any test would be a waste of time unless those . who used its results knew what in fact it did test. In other words, the test must "do what it is intended to dol" (2.) and the extent to which it does this is known as the extent of the validity of the test. Pilliner himself suggests that it can be shown to do this in three different ways. Firstly, it can be shown that the results of the test compare well with measured results on a much later test. This is called "predictive validity" and means that a test is a good indicator of future achievement. The second type of validity he calls "concurrent validity". This can be established by showing that the test results are similar to results on another test whose validity has already been demonstrated. Thirdly, one can show that a test contains the main elements of what has been taught in a particular syllabus, and is therefore a valid test of what has been taught to the children. This he calls "content validity."

In order to be valid, test results must also be reliable. This means that the results must come out the same if the test is administered
several times in the same circumstances. As Pilliner points out, this is easy to establish in the realm of science, where the same experiment can be repeated again and again on, say, chemical samples that are knowm to be roughly similar. In psychology and education, an absolute test of reliability would mean administering the test to the same persons without allowing their experience to increase. Obviously this is impractical, so statistical methods are used to estimate reliability. (3.)

The development of statistical methods to deal with specific testing problems was the other major advance in the field of testing. These methods were applied for two purposes. Firstly a series of formulae were developed which could be applied to test results in order to determine how those taking the test had performed. The second purpose for which statistical methods are applied to test results, is to discover certain facts about the tests themselves. In particular the methods are used to determine the validity and reliability of the tests, as these concepts are defined above. The impact of all these developments on language teaching and testing as such began to make itself felt after the Second World War, and the various threads were brought together in the work of R. Lado, who developed his own particular theory of language testing. He started out from the basis of a language-teaching theory which stated roughly that acquiring a second language involved developing a series of habits, in much the same way as learning the mother-tongue does. Where a mothertongue habit suits the needs of the second language, there will be no learning problem, and this is true whether the habit is that of sound
production, phoneme differentiation, word recognition or sentence construction. The problems arise when a pattern of mother-tongue habits will not work in the foreign language, and a new series of habits have to be developed. Lado relates these problems to his theory of language testing by saying that "testing control of the problems is testing control of the language."(4.) The mother-tongue habits that work in the foreign language do not, in general, need to be tested; if, then, the children can be shown to have acquired the other, nonmother tongue habits as well, then they can be said to have mastered that certain part of the second language. At this stage the ability to analyse language down to its smallest meaningful elements becomes important, since it is only by making such an analysis; of both the mother-tongue and the second language, that one will identify the units and patterns in which the problems will occur. At the same time, Lado specifies that the learners must be able to cope with these units or patterns "at normal conversational or reading speedдlinguistically valid situations" ${ }^{\text {in }}$ (5.) or else one cannot say that the particular habit has been established in that learner. Given this situation, the next step for Lado was to work out for each level of language a series of tests that would :identify whether a learner had mastered a particular habit. It has already been pointed out that objective type tests are not always ideal for testing habits and skills, but, up to a certain level, it is possible to use them as Lado demonstrates. He distinguishes between elements of language sounds, intonation, morphemes, words, arrangements of words - which can often be tested by means of an objective test - and the total skills
of language, which are integrated from the elements, and which consist of listening, speaking, reading and writing. It is these latter which can only partially be tested by objective methods. Whether one tested elements or skills depended very much on the purpose of the test, according to Lado. Obviously both researchers and teachers may want to test both at different times. In any case, he argues, even if the elements are tested"as separate univers-ies" it should not be forgotten that "they never occur separately in language." (6.) Since this thesis is concerned with reading and since Lado's work was taken into account by the research assistant when devising the tests to follow the teaching course, some of Lado's tests involving reading ability are now briefly described.

Lado was mainly concerned at the "element" level with oral skills that could be tested either orally or through reading, rather than with reading skills as such. However, some of his tests do examine grapheme phoneme relationships, (though normally, as suggested, as a test of phoneme control), while other tests which demand ability to distinguish between phonemes could mutatis mutandis be applied equally to graphemes. Such a test is the minimal pair test. Here a series of pairs of words are read out containing the sound contrast $[i]:[i y]$. The student listens and writes down whether the words are the same (sleep, sleep) or different (sleep, slip.) A variant of this is the triplet, where three words are read out (sleep, slip, sleep) or (hit, hit, heat) and the student writes down the number of the words which sound the same (1, 3 and 1, 2 in these two examples). Another test, which this time involves grapheme - phoneme association, is mentioned as an example of
a sound perception test. In the Spanish example given, the word/le/ is read out and the pupil has to mark on a list before him the correct written form chosen from "le", "ley", "lei". This obviously demands a knowledge of Spanish spelling conventions as well as of Spanish pronunciation and could presumably therefore be just as well used as a test of grapheme recognition.

There are in fact a number of different types of test that can be applied to any particular language learning problem. These have been analysed into four groups by J. B. Carroll depending on the stimulus given and the type of response required. (7.) Firstly there are "tasks specified solely by instruction requiring language production." This type includes essays in the language and the more complex test types. Secondly there are "single stimulus tasks not requiring language production", and the first two Lado tests mentioned above are of this type, since the stimulus is purely an oral one, and the response is not in the target language but in the form of a yes/no response or a series of numbers. Thirdly Carroll indentifies "singlestimulus tasks requiring language production." At a very simple level this could involve saying a word to a child for him to repeat, as a test of his command of the sounds of the language. The stimulus could be a written word or sentence for him to read out loud. Fourthly there are "multiple stinulus tasks involving comparative judgement." The last Lado test is of this sort, since both spoken and a written stimulus are present and the examinee has to compare the two in order to answer correctly. The last three types of test can all be used to diagnose specific language problems, but only if the tests are not too complex. If an examinee needs to be competent in several skills in
order to be able to respond to a test item, then failure to respond correctly may be due to incompetence in all, or any one, of those skills. Such failure would therefore tell us very little about the examinee's linguistic ability. The last Lado test, for example, demands competence in discriminating between both graphemes and phonemes, and if it is to be used as a test of one of these, one must be reasonably sure that the examinee is already competent in the other. Summing up, Carroll says that "successful test construction depends upon a careful analysis of the nature of linguistic competence and performance in terms of what one wishes to test for." (8.) These then were the main considerations that had to be taken into account in designing tests to accompany the teaching course. Firstly there had to be a clear understanding in linguistic terms of the problems, the habits, the competences that were to be tested. The test would have to be designed so that it tested those skills, and those skills only. In its design the test would have to enable the examinees to show what they were capable of doing, and not what they were capable of guessing. Ideally, an objective test would provide the least biased results, assuming that the prior conditions had been met. Finally, the test would eventually have to stand up to statistical and other tests of validity and reliability as defined above. The research assistant's first task was to decide precisely what skills were to be tested. Ideally, since the course was designed to teach reading, one would have liked to test the total skill of reading, that is to say the two-fold task of interpreting the symbols correctly into sounds and of interpreting these into meaning. It is possible to test
this, and indeed the two tests used in the initial investigation had performed just this very task. However, it was felt that such tests could not easily be repeated. Firstly, the reading ability test had required very careful marking, by more than one person, since it was very often difficult to decide from the tape exactly what sound the child had made. The process of marking had taken. some time, even with the two classes used in the initial investigation. However, it was intended that the reading course should eventually be tried out on a much larger sample, and it would therefore become an almost impossible task, in the terms of a research project, to provide sufficient tepes, examiner's time, and probably transport as well to carry out such a test. There was also a second reason for rejecting such a test. One of the basic assumptions of the research project was that English children needed to be taught specific graphemes when being introduced to French reading. It would therefore be ideal if the tests could be devised so that they would contain examples of all the graphemes that had been taught. To design a reading passage that would be both interesting and contain large numbers of given graphemes, though not impossible, would obviously involve a good deal of care and preliminary thought, and the test of total reading skill was therefore abandoned.

Since it was decided not to test reading as a total skill the obvious alternative was to test specific elements of reading ability. It has already been seen that reading is mainly a matter of habit, but this habit works at two levels. Firstly there is the habit of whole-word and whole-phrase recognition. This might be worth testing for with
respect to certain common words. Secondly, and more important from the point of view of the reading course, there is the habit of grapheme interpretation, and the linked ability to decipher unfamiliar or completely new words. Since the reading course had set out with the specific aim of teaching the associations between certain graphemes and phonemes, it was obviously important that the pupils' competence in this respect should be tested. It was decided therefore to concentrate mainly on testing the hypothesis that the pupils who had been taught with the French reading course had developed to an adequate level certain habits of phoneme-grapheme association. The linguistic skills to be tested were reasonably well understood. The next step was therefore to design a number of tests that would test these skills, and only these skills. Since the tests were concerned both with phonemes and graphemes, it was obvious that it would be difficult to eliminate all other elements apart from the relevant one of phoneme-grapheme association. Finally, however, three types of test were decided upon.

The first test (called type l) was of Carroll's third type, involving two stimuli and comparative judgement. Very roughly it is similar to the example from Lado. In this case the student has in front of him a group of four French words, for example:si sais sous seau

He then hears the teacher say the sound [50] i.e. the word seau. He decides which spelling fits this sound and writes a figure "l" against it.

The teacher then says the sound $[5 \varepsilon]$, the word sais. The pupil marks a " 2 " against what he judges to be the correct word. Finally he hears $[s u]$, (sous), and marks this with a "3". The three words come reasonably quickly, so that the pupil does not have too long to think. He should ideally make an habitual association between the sound and the correct spelling. This should be a good test of grapheme-phoneme association although a confusing element could be failure to identify the sound pattern correctly. In the example given, this is unlikely to happen, since $[0],[\varepsilon]$, and $[u]$ are clearly differentiated for English speakers. However this factor will possibly upset results if $[u]$ and $[y]$ have to be distinguished (French/ou/ and Zu/ or if the nasals/an/, /en/ are contrasted with/on/. (For the tests of this type actually used, see Appendix B, pages 272, 275, 278). The second type of test (test type 2) was slightly more complex, and did not fit neatly into any of Carroll's definitions. The children had in front of them a French sentence, with letters missing from some words, for example:-

- est un garmon. Il er-e du -omlat.
 - (C'est un garçon. Il cherche du chocolat) and had to fill in the missing letters, $c, \xi, c h, c h, c h, c . T h u s$, two stimuli are present, a written and a spoken one, and the testees had to make a linguistic response. Obviously, this test is not as clear cut as type 1 . It has the same drawback as type 1 - occasional failure to identify sounds plus two others of its owm. Firstly the length of most of the sentences provides a memory problem. Secondly the pupil is now being required to recall and reproduce the grapheme rather than simply to recognise it.

This is therefore tending towards an exercise in writing. It can therefore be said of those who do well on this test that they must be competent in grapheme-phoneme association, as well as in a number of other abilities. Those who do badly however cannot be written off as unable to make the phoneme-grapheme association; their poor performance may be due to one of the other factors. (For the tests of this type actually used, see Appendix $B$, pages $273,276,279$ ).

The third type of test (type 3) is, like type 1, of Carroll's type 4, but providing four stimuli, and requiring a comparative judgement to be made. The stimuli are in written form consisting of a group of four words, for example:-

> peu
> peau
> pou
> pot

The child has to read these to himself and then underline the two words which have the same sound. In this case there is practically no interference from outside factors. Either he is able to read the words correctly and spot the two similar ones, or he is not. (For tests of this type actually used, see Appendix B, pages 274, 277, 280). One could tabulate the format of these three tests as follows:-

| Test type | Source of phoneme | Source of grapheme |
| :---: | :--- | :--- |
| 1 | Teacher (or tape) | On paper |
| 2 | Teacher (or tape) | Pupil's memory |
| 3 | Pupil's memory | On paper |

The aims of the three types could be summed up as being:Type 1 - given both the sound and the writing, can testees match the two quickly and accurately;

Type 2 - given the sound only can they recall the written form correctly; Type 3 - given the written form, can they recall the sound correctly. Within all three types of test, it was decided to include a proportion of words that the children had met in the reading course and which they should therefore be able to interpret as whole words, without recourse to sounds, and a proportion of words which they had not seen, and perhaps had not heard before, but which they could interpret if they had fully grasped all the grapheme values. An examination of the children's performance on these two groups of words would indicate firstly how great an impact individual words had made on them, and secondly how skilful they were in analysing new spelling shapes into the correct sounds.

It was decided to test only a certain number of the special graphemes at a time, and therefore the testing was split into three sessions, referred to as $A, B$ and $C$. The first session would take pace after Unit 4 of the teaching course, and would test the graphemes $\mathrm{A}, \mathcal{G}, \mathrm{CH}$, I, 0, AI, EAU, OU, and EU. The next session, after Unit 7, wo uld test mastery of $E, O I, O U, U, A U$, and $J$. Finally, after Unit 9, the third session would test EN, IM, ILLE, AN, and IEN. Each of these sessions would contain three tests, of types 1,2 and 3 respectively. The text of these tests is printed in Appendix B, page 272, together with instructions for one of the units. (9.)

## Notes to Chapter 6.

(1) Burstall, C. French from Eight.
(2) Pilliner, A. E. G. in Davies, J., ed. Language Testing Symposium. Page 30.
(3) Pilliner, op.cit. Page 24.
(4) Lado, R. Language Testing. Page 24.
(5) Ibid, Page 24.
(6) Ibid, Page 25.
(7) Carroll, J. B. in Davies, J., ed., op.cit. Chapter 4.
(8) Carroll, op.cit. Page 69.
(9) For convenience, reference is of ten made to these tests by an abbreviation. Thus the Viens Lire testing unit $A$ is referred to as VLA, and its three parts are VLAl, VLA2, and VLA3. Similarly testing units $B$ and $C$ are referred to as VLB and VLC and their constituent parts are VLB1, VLB2, VLB3, VLCl, VLC2 and VLC3.

## Chapter 7.

## The Pilot-Study: Testing the Teaching Material

By the end of the Summer term, 1966, a French Reading Course, which was to be called "Viens Lire", had been designed, together with three batteries of accompanying tests. In the academic year 1966/67, a new worker - this time a research student - took on the day-to-day running of the project. (1.) She had to undertake two tasks: firstly, to try out the Viens Lire Course under fairly normal classroom conditions, discover what methods of teaching were suited to it and assess its merits as a course; secondly, to try out the testing material and obtain preliminary results as to likely pupil achievement. In her first task, described in this chapter, the main evidence would come both from her own impressions in the classroom - since it was intended that she should do the teaching - and from the results of the tests themselves. The assessment of the testing material is described in Chapter 8. The method of procedure envisaged was that the research student vo uld be allowed by a small number of primary schools to take over the teaching of $\operatorname{French}$ to a suitable fourth year class within each school for a year and to introduce the Viens Lire Course as a normal part of the French curriculum for that year. This would give the research student the opportunity of studying children's reactions to the course, and, more important, of working out for herself the best teaching methods to use with the course. The research student was in fact well qualified to carry out this task as a teacher except perhaps in respect of experience, since she had only completed her Education Diploma in the term preceding
her year with the project. Her qualifications otherwise were good; she had e. degree in French which she spoke naturally and with confidence. On her Education Diploma she had obtained a Grade 1 and also a distinction in teaching. As a teacher in the classroom she was able to put her knowledge to good use. The author of this thesis, who saw her teaching on two occasions, was struck by her lively personality, her ability to make a lesson interesting, and her thoroughness in controlling the teaching situation. Evidence of this is also found in the tapes accompanying her thesis. In general, then, it would be fair to say that her teaching ability was above average. In selecting appropriate classes for the pre-trial, certain limiting factors had to be taken into account. Since all the teaching of the Viens Lire Course was to be carried out by the research student, it was necessary that the schools should not be too far from Durham, and obviously there must not be too many of them. Since the course was designed to follow on from Bonjour Line or the Nuffield French Course, it was preferable that the classes should have been taught from one or other of these two courses, and preferably for at least one year previous to the beginning of the experiment. Age itself was not a serious consideration, although it was expected that the majority would be ni.ne-plus or ten-plus. If some variety could be obtained in the sample this would be all the better, since it was hoped to examine Viens Lire at work in a number of different circumstances. Eventually permission was obtained from two schools to use one class at each for experimental purposes. The first school provided a class of 31 pupils. These, like all the pupils at the school, were girls. Their
home backgrounds were mostly good, since they came mainly from professional families, and, as a result, they tended to be well motivated towards linguistic work. This school was organised in such a way that classes were quite accustomed to having their class teacher for three or four subjects only, and specialists for the other subjects. This meant that the children were used to a subject based approach, and to a number of different teachers, and this made it easier for the research student to fit into the scheme of things with little disruption. The class had been taught by a very able French graduate teacher, and were able to start the Viens Lire in November, 1966, having by then completed lessons 1 to 15 of Bonjour Line. The teaching took place in the children's own classroom, so that they felt at home. The research student found this room rather small, and restrictive at times, but on the other hand it could be blacked out and projection facilities were quite good.

Class 2 were in most ways completely different from Class 1. They were a mixed class of 34 , from a small rural Primary School. The class contained a double age range of pupils, so that only fourteen were aged ten-plus and the rest were nine-plus. The parents of these children tended to fit into the skilled and semi-skilled categories, and as a result, they were not as sophisticated as the pupils from school 1. Nearly all their teaching was carried out by their class teacher, and child-centred discovery methods played a much larger part than at school 1 . Ihey had been taught French in the previous year by the Headmaster, who, of course, was another person with whom they were familiar. These circumstances made it harder for the research student to win the children's confidence in the early stages. Another problem was that the
younger children had not yet sufficient oral background to begin the Viens Lire reading course, and the research student had to spend the first term teaching from Bonjour Line. Work on Viens Lire began with this class in February, 1967, by which time they too had reached lesson 15 of Bonjour Line. For this class, all the audio-visual teaching had to take place in the school hall, as their classroom lacked the necessary facilities. This meant a further disturbance for them and the acoustics in this large hall were not good, All non-audio-visual teaching was done in their own classroom.

It can be seen that class 1 had a large number of advantages over class 2, in background, experience, and, not least, in the fact that they were able to take the reading course at a much more leisurely pace and spread it over twelve months.

As a general guide to intelligence, three NFFR aptitude tests were given. These were the English progress test C2 (EPC2), the non-verbal reasoning test 3 (NV3) and the Primary verbal test 3 (PV3). The scores obtained were:-

|  | EPC2 | NV3 | PV3 |
| :--- | ---: | ---: | ---: |
| Class 1 | 1ll.8 | 108.4 | 106.0 |
| Cless 2 | 98.8 | 99.0 | 99.9 |

Here again class 1 has an advantage over class 2, especially on the English progress test. Only the PV3 difference is not significant at the . 05 level. Within class 2, the research student found that the younger group scored more highly on these tests than the older group. The differences between these two classes - one in an excellent position to start and continue the course, the other at considerable
disadvantage in doing so - makes the sample an extremely interesting one. From the point of view of the research project, the only undesirable feature was the limited amount of time available to teach the Viens Lire course to class 2. Both classes completed the course in July, 1967, but, whereas for class 1 this was eight months after starting the course, for class 2 it was a mere five months. Although this enabled the research student to study the effects of varying teaching speeds, it also meant that in the case of class 2, less time was available for observing the course at work.

The research student found that the theories behind the course worked out well in practice in the classroom situation. Her first concern was with the use of the tape and slide material, and, in particular, she had to determine what combination of slides to use, how often to repeat a sequence of slides and how soon to move on to a new section. As a result of some preliminary trial and error, the final scheme that she decided upon in both classes was a five stage plan.

## Stage I

A simplified oral French Audio-visual lesson, taking up one 20-25 minute lesson. The children look at the colour slide sequence, listen to the tape and follow the story through. If necessary, a question-andanswer sequence follows, in French, to make meanings clear. (This only became really essential in the later units - it was found generally that the French was easy enough orally for the children to understand.) Finally the slides were shown again, with the children repeating after each phrase on the tape. (The research student emphasised that the establishment of good pronunciation at this stage was essential to prevent interference when the written forms were introduced.)

## Stage II

In the later units, this often began with a quick run-through of the coloured slides and the tape to remind the children of the story. The main part of Stage II is introducing the written form. The tape is played again, with a long pause after each phrase. As the phrase is spoken the colour slide appropriate to the phrase appears. The children repeat. Then the first type of black-and-white slide, the picture plus caption, appears. The whole class "reads" the caption. Because they have just said the sentence, there is little likelihood of their making mistakes in their so-called reading. The research student felt that it was essential that a firm association between sound and print should be established at this stage in order to prevent error creeping in in future, and therefore a second lesson, or part of a lesson, would be devoted to another run-through of this combination of slides. On this second occasion, the class as a whole would repeat after the tape, but individuals would be picked on to "read" when the caption appeared. By this means the connection between the spoken and the written forms was well rammed home. The research student wrote: "experience showed that a major effort at this point in each unit was worthwhile if the foundation of good reading habits was to be successfully laid."(2.) Two lessons were taken up with this stage.

## Stage III

The tape with the long pause after each phrase is played again. When the phrase is spoken the picture-plus-caption slide is shown, and the class reads silently. Then a slide with the caption only is shown, and the class now read. The tape still provides a reminder of what the
printed words will say, but the visual stimulus for speech is now reduced to the printed words only. If Stage II has been completed successfully this third stage should prove no problem, and should not take up more than half a lesson.

## Stage IV

In the following lesson the slides with the words only are shown, and the children read them with the tape only being played after each class or individual response as confirmation or correction. The research student felt that this stage was not essential, especially for class 1 ; however it could be turned into a game, with the children trying to "beat the tape" in reading the sentences correctly.

## Stage V

In the subsequent lesson the slides with the words only are shown, but in random order. This demands that the children apply their brains to recognising the phrases in an unfamiliar order. Memory of the order of the story is now no longer useful. The research student felt that this stage was both a valuable experience for the children, making them concentrate on the mritten words, and a useful test of their reading ability.

The progress of the teaching and slide material can be tabulated as follows:-

| Stage | Slides | Tape | Children's reaction |
| :---: | :---: | :---: | :---: |
| I (a) | colour | yes | listen, understand |
| (b) | colour | - | answer questions |
| (c) | colour | yes | repeat |
| II | (colour ${ }_{\text {(picture-plus-words }}$ | (yes | (repeat <br> ("read" |
| III | (picture-plus-words (words only | (yes | $\begin{aligned} & \text { (silent "read" } \\ & \text { ("read" } \end{aligned}$ |
| IV | words only | $\{-$ | read |
| V | random words | - | read |

The programme from so-called "reading" to actual reading takes place slowly over the last four stages. It should be noted that at this point the children have learnt to read the phrases from the text as blocks of words, and as yet they have not been taught any individual spelling conventions. However there is strong evidence that the brighter children at least are aware of some of the more obvious differences between English and French spelling. Thus many children in class 1 were aware early on in the course of the cedilla on some $c^{\prime} s$ and of accents and also asked about final consonants being silent, before this had been pointed out to them.

Partly for these reasons, no doubt, the research student found that it was possible to start teaching the use of specific graphemes very early on in each unit. From Stage II onvards, where tape and slide work very often did not take up the whole lesson, it was possible to introduce other activities either provided for, or suggested by, the course. The first of these activities was black-board work to isdate specific graphemes. This isolation of graphemes was obviously a vital activity within the theoretical framework of the course, which presupposed that children would need to be made aware of such spelling variations. The main method used by the research student in the early units was to draw a picture on the board, similar to one of the slides, and to elicit from the children the name of the object in the picture. This object was specially selected to contain in the spelling of its name the grapheme to be studied that day. (In later units, verbs or adjectives were often used as "starters", and the picture approach was often abandoned.) The word would be written on the board, and
the children immediately invited to read it. A series of such sentences would be built up, and the children would then be led to identify first the common sound and then the common spelling. The grapheme would then be written, and read by the children. Finally sentences from the course would be suggested for each word, and these sentences would be written on the board. Hence the process came full circle from complete sentences in the course, via words to graphemes, back to words and finally to meaningful sentences. This activity would start during stage II of each unit, beginning with words and sentences in the course. By the end of Stage II, words containing the particular grapheme which were known orally to the children, but which as yet had not been seen in writing, were also written up, and new sentences devised. The teazlegraph material, described briefly at the end of Chapter 5 proved extremely useful from an early stage in making the children examine words carefully, thus making them more avare of the small differences without having to continue theoretical work with graphemes. The main use of the teazlegraph words (individual words printed on paper that could be attached to a felt cloth) was in a sort of dictation game. Its final form involved distributing a number of words to each child. A sentence from the particular unit would then be played from the tape to the children, and the children who thought they had the correct words to make the sentence would bring them out, and form the sentence on the felt cloth. The whole class would then read the sentence. By this means a large number of children became actively involved in close examination of words.

The method could be varied by allowing a child to read the sentences from the teacher's printed text, or by the teacher suggesting new sentences. Another activity more closely related to grapheme analysis was to ask the children to find all the words containing a certain grapheme within a time limit. (The teazlegraph pack also contained certain morphological endings, such as verbal endings - s (tu form) and - nt (third plural) or plural - x. These were occasionally used to explain the function of some of the normally silent endings.) It is obvious that the use of the teazlegraph material allowed the children to take a much more active part in the lesson, and as such they proved very useful. The primary aim was always to make children more aware of grapheme differences, and the final set of material provided by the course for this purpose was the constructive drills mentioned briefly at the end of Chapter 5. In a series of sentences a particular minimal difference would be explained by example. The problems dealt with by this method were three-fold. Firstly, there were drills illustrating graphically minimal pairs, such as ei/oi, or eu/au. (e.g. Elle a des chaussettes jaunes et des fleurs bleues.) Secondly, differences in spelling the same phoneme were drilled, such as ai/e $[\varepsilon]$, or an/en [ $\tilde{a}]$ (e.g. L'enfant a soixante centimes.) Thirdly, phonetic distinctions difficult for English speaking people such as u/ou, en/in, were drilled (e.g. Minou court sur le mur.) For each problem a series of sentences were provided. These were written on the board by the research student and then each was read by one individual. The whole class could offer corrections. "Experience revealed that this period
of activity was beneficial allowing teacher and pupils a period of close study and an opportunity for further question and answer."(3.) These then were the methods provided or suggested by the course for follow-up work after the tape and slide section. For the most part they were designed to make the pupils aware of the grapheme differences, and to enable the teacher to develop this very important aspect of the course. However, it will be remembered that a good reading course should have the ultimate aim of enabling pupils to reach for meaning. The stories on tape allowed this to happen at the beginning of each unit, but obviously fresh material and fresh "thought getting" activities were needed if the children were to benefit fully from the course. The research student tried out a variety of such activities. The first extension activity was a comprehension test. A series of three French passages were devised by the research student, being short stories, new in content but formed from words in the first three, the first six and all nine units of the course respectively. A series of English questions was also devised for each text. The children read the texts silently, and then answered the questions in English on paper. These were collected in. Immediately the teacher read out again the whole story, and several pupils also read. Then the questions were discussed in class and the correct answers suggested. The scores for these tests were encouraging.

Pest 1
(Total: 10) (Total: 10)
Class 1
8.86

Class 2
7.83

Test 2
8.58
6.16

Test 3
(Total: 10)
Not done
Not done

The children's reading out loud of these texts was found to be dull and monotonous, emphasising once again the point made by Lado (4.) ..
that reading out loud is a special skill and needs to be taught as such, both in the lifother-tongue and in the foreign language. The second extension activity that was attempted was controlled writing on the black-board. The need for control ras essential, since mistakes could all too easily slip in from English conventions. Three types of activity were attempted. In the first type, the research student would show a picture, then say "Qu'est-ce que c'est?" and finally write the question on the board. A child would answer "C'est un chat." and would attempt to write this on the board. The research student would be close to correct mistakes. The second type of activity consisted of asking a pupil to write a title on the board, for example: "Leçon Cinq. La Féte de Marie." These titles appeared at the beginning of every set of slides. Thirdly, a sentence with spaces in it would be written by the research student, e.g. "Bonj-r, tu c-rs à la fenêtre", who would then say the sentence. A child would then fill. in the gaps. (This last activity is similar to testing method 2 in the test designed for the course. It might be objected that the research student was teaching towards the tests, but the activity can obviously be justified as a teaching method, making the children think about a particular grapheme.) In all this writing, the research student indentified two essentials. Firstly, an oral stimulus should always come first before a child wrote anything. Secondly, all writing should be on the board, where it could be quickly corrected. As an extension of writing, one dictation was attempted with Class l. It was not judged a success, and was not recommended as a suitable activity within the scope of the course.

Class 1 finished the course with some time to spare before the end of the year. A reader was therefore introduced, which enabled them to put their new reading skills into practice. This seems to have been a successful activity. (5.) Class 1 also undertook a simple piece of free composition just before the end of term. This consisted of a simple description of" "Ma Maison", which was well prepared orally in class before writing was started. On the whole, most of the pupils wrote a simple but effective description.

As mentioned above, some discussion took place on inflexional endings. However, the research student felt that great emphasis should not be laid on these, and that they should only be discussed if brought up by the children themselves.

In general the research student found that the course itself worked well in practice. Principal recommendations for modifications were relatively minor. They were that the slides should be replaced by film strips, which would enable other teachers using them to handle them more easily; and that a contrastive drill for the grapheme "eau" should be included, since this was a grapheme which caused some difficulty in the texts (see next chapter). As a result of her own experience the research student recommended that a leisurely pace of teaching, lasting up to a year, probably suited the course best, and that twelve months previous oral experience was probably the minimum necessary for success. All in all, the research student was impressed by the design of the course as it stood. "The graded and strictly controlled nature of the reading course was an important factor in inspiring confidence and a sense of achievement in the children." ${ }^{(6 .)}$

## Notes to Chapter 7.

(1) A full account of this work will be found in Wynn, J., Trial and Development of Materials for the Teaching of Reading French in the Primary School. See Bibliography.
(2) Wynn, op. cit. Page 60.
(3) Wynn, op. cit. Page 80.
(4) Lado, R. Language Teaching, a Scientific Approach. Page 137.
(5) The reader was Le rideau se leve, by Fordham, 0. M. and Lewis, V. L. R., published by Harrap, 1963.
(6) Wynn, op. cit. Page 65.

Chapter 8.<br>The Pilot Study: Assessing the Tests

The main task of the research student in 1966/67 was the establishment of a satisfactory teaching method for use with Viens Lire. This in itself took up a large amount of the research student's time. However, two other tasks had to be completed. The first of these was to examine the tests for reliability and validity, and to standardise them in some way. The second task was to use the tests with the pilot experimental sample in order to obtain a preliminary quantitative assessment of the effectiveness of the Viens Lire course. Before either of these tasks could be undertaken the testing material had to be brought into a final form.

For reasons explained later in this chapter, it was decided to administer the tests to a number of other classes apart from the experimental sample. It was desirable that the tests should be administered to all classes in the same form, and therefore tapes and booklets were prepared in a standard format. Each child taking the tests would have a three page booklet for each batch of tests, the first page containing Test Type 1 , the second Test Type 2, and the third Test Type 3. In tests 1 and 2 of each batch, French words or sentences had to be read out to the children; tapes were prepared for this purpose by native French speakers. The tests were administered to a class that was not involved in the teaching experiment, and as a result of observations in this class, optimum timings and pause lengths were built into the tapes before they were used in the experiment proper. Finally an instruction booklet was prepared for every teacher who might administer the tests. For every test, whether scientific or not, there are two major criteria which must be satisfied. These are: that the test should really test
what the designer wishes it to test, (in this case French reading), and not some other factor; and secondly, that the test scores should depend mainly on the children's ability and not on some random external factor Which might produce varying results from one sitting of the test to another. These two criteria are referred to respectj.vely as the validity of the test and the reliability of the test. There are several ways of assessing each and these were discussed in Chapter 6. To assess a test's validity, the most commonly used method is to correlate its results with the results of an already established test of the same intelligence factor taken by the same group. Unfortunately, no suitable test of French reading existed at that point in time, and this method had to be abandoned. Other methods of validation involved statistical methods too sophisticated for the limited time and material available. Since it was desirable to have some external standard aginst which to judge the results obtained from the experimental sample, and since the external standard could not be in the form of another test, it was thought advisable to administer the test to another group of children who could act as a control group. It should be noted that simply administering the test to an external control group will not help in any way to validate the test, and it will be necessary to return to this question later in the chapter. Since the control group results play a large part in all the subsequent discussion the make-up of this group will first be looked at.

An ideal control group should differ from an experimental group only in one aspect that is being tested in the experiment. In this case a primary French reading course is under examination, and the use or non-use of this course should ideally be the only difference between
the experimental group and the control group. Unfortunately it proved necessary to select a control group which, although similar to the experimental group, also differed from it in some other important aspects. The whole of the control group was selected from second year grammar school classes and they took the tests during the Easter term of 1967 , by which time they had been exposed to French for about the same length of time as the experimental group, and had almost certainly come across all the French graphemes being tested in the tests. As they were a grammar school sample, they differed from the experimental sample in three ways. Firstly, they were on average two years older. This meant that their learning processes would have become much more analytical. Secondly, the method of teaching would probably be different: an earlier introduction of reading and writing, even in an orally based course, and a large proportion of learning taking place through the written medium. Thirdly, they would be more intelligent. As seen above, the experimental sample, and especially class 2 , contained almost loo of the ability range, as measured by the ability tests, whereas the grammar school sample would contain only the top $20 \%$ to $30 \%$ of the ability range. These differences would have to be taken into account when analysing results. (1.)

The control group was drawn from three mixed grammar schools in Co. Durham, who provided in all twelve classes containing a total of three-hundred-and-sixty-three pupils. The tests were sent out to these schools and administered to the classes by staff at the schools. The tests were administered to the experimental classes by the research student at the appropriate times (Test Group A after Unit 4 of Viens Lire, Test Group B after Unit 7, and Test Group C after Unit 9.)

The tests were examined for reliability and validity on the basis of the control group (1967 C) results which, unlike the experimental group (1967 E) results, all became available at about the same time early on in the experiment. Reliability could be measured statistically, since, unlike validity, it depended upon internal rather than external comparison. The main demand of reliability is that if a test is given to the same group twice, then the results should be the same, in other words they should not be affected by factors such as guessing or random selection of answers. The best method for testing reliability is to give the same test to the same group twice within a short period of time and then measure the correlation. That does not work well for educational tests., where memory or extra learning can affect the results. A way round this is the split half method, which splits the one test.into two halves, and treats the results of the two halves as though they were different attempts at the same test. Using this method, Wynn found a reliability coefficient of 0.945 for all nine tests taken as a whole. For a sample of this size, the figure is satisfactory, and indicates that there is consistency of measurement within the tests, and that therefore the tests are reliable as a whole. Because no test of validity as such could be made, it was necessary to identify such items of evidence that might support the tests' claim to validity. The first of these is the proven reliability of a test, since if a test is to be valid it must first of all be consistent. However, the claim of consistency by itself is not enough if one wishes to show that the tests are actually testing French reading. Therefore the tests were further examined from three other points of view. These
were: inter-test correlation; item analysis; and a non-statistical "face validation" combined with what Pilliner calls "content validity". (2.) Wynn produced a correlation matrix for all nine tests with one another. This will be found in appendix $F$ (page 309). It can be summarised as follows: Correlations were highest between tests VLA2, VLB2 and VLC2 the grapheme reproduction tests which came second in each batch of tests, - the range being $0.744<r<0.766$. Correlations were lowest for test VLAl with all other tests, the renge being $0.168<r<0.377$. For all other combinations correlations lay in the range $0.378<r<$ 0.588. Test VLAl is obviously a special case, with correlations approaching zero. Wynn suggested that first test nerves may have played a part and also points to evidence of some arbitrary selection of answers (Chapter 9). (3.) In fact it can be shown that a child with little or no knowledge of French reading stands about a one-in-six chance of scoring 5 out of 20 on this test, and the chance of scoring zero on the test by random selection of answers is as low as 7 in a 1,000 . The chances of one or two weak pupils scoring freak high results are fairly strong, and this too would slightly effect the correlation figures. Ignoring the special case of test VLAI, the moderately high correlations of the other tests with one another do suggest that some common factor is being tested. This conclusion is strengthened by the evidence of correlations between the three types of tests; the scores of tests VLAl, VLBl, VLCl were combined to form one set of results, and the same was done with tests VLA2, VLB2, VLC2 and with tests VLA3, VLB3 and VLC3. VLAl, VLBl, VLCl used the first method of testing, VLA2, VLB2, VLC2 the second method, and VLA3, VLB3, VLC3 the third method. Correlations
between the three methods were in the range $0.623<\mathbf{r}<0.705$. This indicates that one or more ability factors were common to all three types of tests. Even at this stage of course, there is nothing to indicate that these common factors have anything to do with French reading.

The research student was unable, through lack of time, to carry out a thorough item analysis. However, easy items and difficult items were examined to see if a pattern emerged. (4.) Among the easy items there were 24 (out of 243) which were answered correctly by more than $90 \%$ of the control group, and 10 of these were answered correctly by more than $95 \%$ of the children. If the experimental group answers followed the same pattern then these items would not effect the order of marks and could be considered unnecessary. However, the research worker concluded that there was no reason to assume in advance that the experimental schools would find these items equally easy, and therefore no major change was suggested. At the other end of the scale a group of low scoring items was identified. There were 19 of these in all. Five of them were answered correctly by less than $10 \%$ of the control group. For similar reasons to those mentioned above these low scoring items were also allowed to stand. From this investigation of the items one can conclude that there is no reason, in a statistical sense, for assuming that any of these items are unsuitable as test items. This is not to claim, however, that they are suitable items for testing French reading. Two further problems were raised by the tests of type 2 (VLA2, VLB2, VLC2). These tests asked the child to fill in missing letters in

French words in response to the sentence being read out to them. No less than 14 of the 19 items scored correctly by less than $30 \%$ of control candidates came from these tests of type 2. The first problem discovered by the research student was one of memory, especially on the second half of the tests, where many of the words with mis sing letters were not well known words (in fact many were unknown to the experimental group). Within this group of words certain items contained two gaps to fill in and these proved very difficult. It turned out in the event that the two experimental classes also had difficulty with these items. The second problem was related to four specific items. The first of these was the word balai on test A2. The sound $[\varepsilon]$ could be represented here by /ai/h/et/ (very tempting, because of ballet) and /e/. Similarly with the word rameau (test A2) where the sound [0] could be spelt /eau/,/\%/, or /au/. Much the same problem applied to glacé, where [e] could be spelt/é/, /er/ or /ez/. It was obviously not fair to expect the children to distinguish these, although in the case of $[0]$, there is a distinction (see Chapter 6) in positional use between /eau/ and / / / /au/. The last of the four problem items was bûche. Both $[y]-/ \hat{u} /$ and $[\delta]-/ \mathrm{ch} /$ had to be filled in. The problem of course was the circumflex, which understandably no child marked. The research student concluded that these items were not fair, and should probably be excluded; and in respect of test type 2 as a whole she wondered whether it was reasonable 'to expect those children following the Viens Lire course to write and spell to prove that they can read". (5.) Obviously, failure on a test of this type would tell nothing about a pupil's reading ability, although success, as is suggested below, might well prove that reading ability was present.

Finally, a face validation of the tests was carried out. Face validation simply means that a test looks as though it is testing the right thing. As stated in Chapter 6, each of the three test types was designed to test one facet of reading. Thus test type 1 tested the ability to associate sound and spelling. Test type 3 tested the ability to recognise the sounds represented by spellings. It was suggested in Chapter 6 that test type 3 came close to a test of reading, at least of silent reading. Finally it was pointed out that test type 2 demanded not merely passive recognition but actual writing down of graphemes. One could argue very strongly that one must be able actively to recognise graphemes in order to be able to write them down, and that success in this test would be a strong indication of reading ability. It will be recalled that the correlation between the three tests of type 2 - VLA2, VLB2 and VLC2 - was in the region of 0.75 , and this is a further encouraging sign. Introducing Pilliner's concept of content validity, it can also be claimed that at least half the items in the tests are items that have been taught to the experimental group in the reading course, and that therefore the tests do test what has been taught, at least on an item basis.

Because of the apparent relevance of the content, because of the special hurdle in the second type of test and because of the moderately high correlations between the tests, it is possible to claim at least the following: firstly, the tests do all seem to be testing one or more common factors of ability; and secondly, it seems at least probable that the abilities they are testing are some, if not all, of the abilities that make for success in reading French. To this rather limited extent it can be claimed that the tests are valid.

Having carried out this validation study as thoroughly as was possible in the circumstances, the final task for the research student was to examine and compare the results of the gramar school control and primary school experimental groups in order to assess the success of the reading course and to identify remaining problems. The first step was to make a purely quantitative comparison, and this was done in two ways. The first of these was a comparison of mean scores for certain combinations of tests. The combinations chosen were VLAl, VLBl, VLC1; VLA2, VLB2, VLC2; and VLA3, VLB3, VLC3. The method of comparison used was chi-squared. On each set of tests the primary school experimental group's mean score was higher than the control group's scores and the calculation of chi-squared indicated that the differences were significant at the . 001 level. This indicates a fair measure of success for the experimental group.

The second comparison made was a chi-squared test of 13 individual test items selected at random from the fijrst batch of tests. (Time did not allow a full comparison, though this was later carried out by the present author; the results are summarised in appendix G, page 310.) Of these 13 the control scores were significantly higher on 3, there was no significant difference on a further 5, and on 5 more the experimental schools had scored significantly higher scores. The full analysis shows a similarly balanced position. The success of the experimentel pupils was achieved in spite of the superior age and average intelligence of the control sample. The research student ascribed this success quite reasonably to the main obvious difference between the two groups, i.e. the specific teaching
of reading that took place in the experimental sample. Another possible reason is the fact that this was a special, experimental situation, and this may have produced better work from both the research worker and the pupils than might otherwise have been the case. This is the socalled Hawthorne effect, in which the awareness of being part of an experiment may distort the performance of the subjects of the experiment. Obviously there were a large number of unnatural elements in the teaching situation of both experimental classes - an outside teacher, a special type of testing, new class room routines, - which may have affected the performance of the children. This is discussed at greater length in Chapter 13.

Within the experimental sample the research student compared the results of the two classes, once again using the same combinations of tests, i.e. VLAl, VLBl, VLCl etc. For all three combinations Class 1 had scored higher means than Class 2, and a chi-square:', test revealed that these differences were significant at the . 001 level. Class 1 had had many advantages over Class 2 , as were described in the previous chapter. These had included family background, greater measured intellectual ability, a greater sophistication in approach to learning, a more homogereus age grouping and as a result a more even oral French background. Any one or more of these causes may have contributed to the class's greater success. At the same time it must be pointed out that the research student felt quite satisfied with the result of Class 2 in themselves; they only appeared less successful in comparison with the results of Class 1 , which had been exceptionally good. Finally the research student tried to assess where problems remained. This involved an examination of answers for patterns of response
grapheme-by-grapheme. As a result of this process the following
problems were identified from tests of type 2:-

| French |
| :---: | :---: | :---: |
| spelling |


| ch | Rendered as |
| :---: | :---: |
| eu | sh |
| interference |  |

in
in
e
u

The examples of interference from English are particularly interesting. The last two graphemes were a special problem in the tests of type 2 since they could be replaced by two other French spellings. This problem was discussed above, under validity. The spelling/oi/ was not too great a problem, and the English spelling/wa/ made very few appearances in its place. Nasals were found to be a remaining problem, and the main cause seemed to be that children were still largely unable to distinguish between them. These results suggested that greater emphasis should be placed on these problem graphemes in any subsequent teaching programme. Two main conclusions were drawn from the results of the tests set to the two groups. Firstly, it was clear that the results of the type 2 tests could serve a very useful diagnostic purpose in indicating what French
graphemes had been firmly fixed in the pupils' minds, but that as a test of reading it should be treated with some circumspection. The second conclusion was that the highly successful results obtained by the experimental classes, although pleasing, were too closely linked to the special circumstances of the experiment for any final conlusions to be dram from them. As a result it was clear that a larger sample, taught under more normal conditions, would have to be used in the following year.

## Notes to Chapter 8.

(1) For convenience, this grammar school group which was used in 1967 as a control group is occasionally referred to as group 1967C. The two primary school classes, who were the experimental group in 1967, are referred to as group 1967E.
(2) Pilliner in Davies, J. Language Testing Symposium. Page 30.
(3) Wynn, J. Trial and Development of Materials for the Teaching of Reading French in the Primary School. Pages 119-121,
(4) The lists of these items will be found in Wynn, J., op. cit. Pages 123-127.
(5) Wynn, J., op. cit. Page 134.

PART III
THE ASSESSMENT PROGRAMME

## Chapter 9. <br> The Initial Preparations

The author of this thesis took over as the research student responsible for the day-to-day running of the research project in January, 1968. The aims of this stage of the project were two-fold. The first aim was to assess the workings of Viens Lire in a larger number of normal classroom situations, by using the tests, observations of teaching in progress and comments from teachers and pupils as the main indications of success or failure, and thus to test the specific hypothesis that in ordinary classroom conditions children would score as well on the tests as the first experimental group had done in 1966/67. The second aim was to obtain more information on how children learnt to read French and to discover whether there were any remaining problems, linguistic or otherwise, that were causing difficulty. The results would therefore divide neatly into two sections. Firstly there would be a straight yes or no answer to the hypothesis just stated. Secondly, there would be a much larger, much less prediotable, set of results showing in greater detail what had actually happened in the classroom situation.

The fact that this stage of the research began in January, 1968 somerhat late in the academic year, would obviously affect the shaping of the experiment. The experiment itself was to last one year, and it was hoped to run it in two stages. In the two terms left of the school
year 1967/68, a number of fourth year primary classes would be taught by means of the course, and their results analysed. In the third term of the experiment, which would be the first term of the school year 1968/69, a new set of classes would be started on the course, and these would provide a second batch of information. It was hoped that the first batch of classes would complete the whole course in two terms; it was realised that the second batch would not complete the whole course, but would at least reach the first of the testing units. Before even the first stage of the experiment could begin, however, a large amount of preliminary preparation had to take place, and firstly of course a number of classes had to be chosen to form a testing sample. In order to find schools prepared to take part in the experiment various authorities and schools in geographical County Durham were approached. It was hoped to obtain facilities in up to ten classes, and, in the end, the project was able to contact five schools willing to take part, which were able to provide between them eight fourth year primary classes. One of these schools had already taken part in the previous year's work. Ideally one would have liked to select a fairly large and random group of classes, but naturally there were limitations imposed, mainly concerned with economy. One was also dependent, of course, on the good will of local authorities and headmasters in the final selection of schools. Having established the number of classes involved, it was now possible to embark on the preparation of the teaching material. This divided itself into two stages. The first of these consisted of modifying the form of the teaching course, as a result of experience gained on the
pre-trial. Mainly this meant fixing the order of presentation of the black-and-white slides. It was decided that the slides would for convenience be combined into a series of film strips and that for each unit of the course there would be four such strips, thus:-
(1) Colour pictures.
(2) Black-and-white A.
(3) Black-and-white B.
(4) Black-and-white C.

These four strips correspond to Wynn's five stages of presentation ${ }^{(1 .)}$ in the following way. The colour strip is used for Stage 1 , the oral lesson. Strip A is used for Stage II; the first frame shows the picture only, the second frame the same picture plus the words, the third frame shows the next picture, etc. Strip B is used for Stage III; the first frame is now the picture-plus-words frame, the second shows the words only, and so on. Strip C contains Stages IV and V; for Stage IV it presents the complete set of words-only frames for that unit, and for Stage $V$ it presents these same words-only frames but in a random order.

One other change was made in the form of the course before the materials were prepared, and this was the exclusion from the printed material of the contrastive drills. The course booklet that finally went out to the schools involved in this stage of the experiment therefore contained the texts of the lessons only, and none of the linguistic exercises shown in Appendix A. The decision to exclude these exercises was made in order to save space; the materials to be sent out to the various schools were already very bulky, and it was felt that only the
essential parts of the course should be included. When this decision was made, Wynn's endorssement of the value of these contrastive drills was unfortunately not available, and, as will be seen later, some evidence obtained from the larger group of classes used in 1968 suggested fairly strongly that these drills should not have been excluded.

The second stage of preparation consisted of the actual production of the materials. The tapes were comparatively simple to produce. The master tapes for each unit were available in the Department of Education and the Laboratory technician prepared five copies of each. For the convenience of the classroom teachers different sections of the various tapes were separated by splicing tape. In order to make the film strips, the original drawings and sub-titles were photographed again, this time in correct order onto roll films and five copies were then made of each film by a commercial company. The teazlegraph material which had proved so useful on the pre-trial was also reproduced, consisting finally of basic words that had appeared in the text, plus various plural and verb endings (-s, -x, -nt, etc.) A teazlegraph sheet was also provided. The complete kits, each consisting of 36 film strips, nine tapes, the teazlegraph material, two sets of the texts of the lessons and a set of instructions, were each fitted neatly into a stout wooden box with a sliding top which measured $16 \frac{1}{2}$ inches by $20 \frac{1}{2}$ inches and was $2 \frac{1}{4}$ inches deep. This, in spite of its width, seemed a suitable size for storing, as well as being sturdy enough for handling by children.

The instruction manual provided, which was written by the project
supervisor, had to serve four purposes. Firstly, it had to describe the aim of the course. Secondly, it had to describe the material presented. Thirdly, it had to outline a basic teaching method. Fourthly, and simultaneously with all the first three aims, it had to ensure that the teachers would abide largely by the spirit of the experiment, and that, whilst being free to use the material in the manner that best suited them, they would not undertake anything contrary to the basic theories of the course. I'he aim of the course is described briefly as being to teach French reading to primary school children who have already learnt some oral French. It is also emphasised that writing should probably not be introduced at this stage. This was mainly to keep the research results as uncomplicated as possible. The description of the material follows, and this consists of a rough outline of the theory of the course procedure, followed by a list of materials - films, tapes, etc. actually provided. The last section of the manual is an outline of the teaching pattern for a complete unit. This follows very much the pattern established by the pre-trial with film strips being used first to establish a phrase-by-phrase familiarity with the written material, followed by teazlegraph work to focus attention on particular words, and ending with work on the blackboard isolating individual graphemes and collecting families of similar sounding words.

It was realised that the teachers involved would need some training, however scanty, before embarking on teaching with this new material, and therefore all the teachers were invited to an afternoon session at the Department at which they could inspect the material, be given
instructions how to use it, and finally be able to ask questions. This meeting took place on the 24 th January, 1968 and was attended by all the teachers taking part, except for the more junior of the two teachers from school D (see next chapter.) They were first shown and played the colour strip and the tape for unit 8. As an example of the sort of exploitation that can be undertaken with children using this material, the film strip was shown again synchronised with a tape of a question-and-answer session that had been recorded at pre-trial school 1 with the research student teacher. (2.) The project supervisor made a few general points about the need to use a normal audio-visual method at this stage. Film strip A was then shown, and the supervisor acted the part of the children showing how they first repeat, on seeing the picture and hearing the tape, and then "read" on seeing picture and words. Film strip $8 B$ was demonstrated in the same way, with silent reading expected on seeing picture and words, followed by reading aloud of words by themselves. Then the words-only strip 8C was demonstrated in the same way. In the general discussion that followed it was clear that most of the teachers were quite happy about the audio-visual approach. One or two raised queries about grammar occurring in the course that they had not yet dealt with, and were answered that they need not spend long on teaching this at this stage. It was suggested to the teachers that they should point out silent endings to the children, especially in the first lessons. The meeting ended with a demonstration of syllable practice and analysis, using the graphemes /ien/ and/an/.

It was desirable that the teachers should be allowed a reasonable length of time initially without interiuption or interference to get
accustomed to the new material and the new procedures, but at the same time it was understood that the research student would have to call at each school fairly early on in the course of the experiment in order to administer the three attainment tests (English Progress, Non-Verbal, and Verbal) which had also been used with the previous year's experimental classes. The teachers were also to inform the research student when they had reached the end of units 4,7 and 9 , so that he could administer the three testing units. It was also agreed that the research student would be free to call at the schools reasonably frequently, partly to check on progress, but also to obtain a fuller impression of the school's background, methods, setting and facilities. The descriptive detail. of the experimental sample obtained by these methods is described in the next chapter.

## Notes to Chapter 9.

(1) See Chapter 7, page 88.
(2) See Wynn, J. Trial and Development of Material for the Teaching of Reading French in the Primary School. Appendix I, page 219 ff.

Chapter 10.

## The Experimental Sample

The eight fourth year primary classes making up the sample originally contained 304 pupils in all, of whom 145 were boys. (1.) Two of these boys left before useful results could be collected, and the final size of the sample was 302 pupils. Since the selection of schools depended on the willingness of head teachers and local authorities to take part, it was impossible to arrange for a random selection of schools or classes. Also with this sample it seemed at first sight unlikely that there would be much variation of background within the sample, in view of the fact that it was drawn from only five schools, two of which, supplying half the sample, lay only a few hundred yards apart drawing on practically the same catchment area. Closer examination showed that this was not the case, and that the schools did in fact vary a great deal, in all aspects. The schools are referred to from now on as A, B, C, D and $E$. The last three were all situated within the same town, $C$ and $E$ being the two mentioned above. School B, which was in fact "school l" of the previous year's experiment, was also situated in a town, whilst school A was situated in a mixed industrial mining and rural area typical of some parts of County Durhem. As far as status was concerned, one school was independent, two were voluntary-aided Roman Catholic schools, and the other two were maintained. School $B$ was, unusually, for girls only, which raised certain difficulties later on in assessing results, but for most purposes the results from this school were included with the others. Schools A, B and C provided one class each,
school D provided two classes and school E three classes. Class B was the equivalent class to Class 1 used in this school in the previous year.

The first factor examined was streaming. The first three schools were in fact one-form entry schools, so that the question of streaming did not arise. School D was a streamed school, with three complete classes in each year, and two small classes for remedial work each covering a two-year age range. The head master at school $D$ was convinced of the value of streaming for most subjects, but in particular for French. The two classes used here were the $\mathbb{A}$ stream, whose teacher shared the head master's views on streaming, and the $B$ stream whose teacher felt that streaming was unfair to the lower ability children. The C and D streams did not do Trench, and this was to be a complicating factor in the assessment later on. School E was an unstreamed three-form entry school, and all three fourth year classes were used here. The school had been unstreamed by the present head master six years previously, initially as an experiment. The head master seemed quite happy with the unstreamed arrangement, though, like the teachers concerned, he was aware of the problems, particularly those concerning the brightest children. He was interested in the effect of streaming on teaching French and was particularly interested in an eventual comparison of the results from his school with the results from school D. The greatest difference between the five schools was probably in their catchment areas. School A drew mainly on a working class area, both skilled and unskilled, although the head master estimated that parents' interest in their children's education was probably slightly higher
than might have been expected in most working-class areas. There was a small admixture of children from higher socio-economic groups from a new private estate that was just growing up. School A in fact represented the lower end of the socio-economic scale in the sample. School B on the other hand represented the other end of the scale, drawing almost exclusively on groups $A$ and $B$ with professional families forming at least half of the catchment area. Schools $C$ and $E$ drew on the same catchment area as each other. The head master of school E estimated that some $60 \%$ to $70 \%$ of his pupils came from a good council estate, and most of the rest from a private estate. They thus formed a good cress-section of the population, although school $C$ did have a small floating population of children from a local children's home. School D drew almost exclusively on what the head master called a "good working-class district" made up largely of children from the homes of skilled and semi-skilled workers. As a whole, therefore, the sample probably contained a reasonable cross-section of the community, though perhaps a slightly biased one. In atmosphere and discipline the schools also differed to a certain extent, and this tended to be related to attitudes to modern developments in primary teaching, although it was not possible to assess this fully for every school. Schools A, B and C tended to be fairly tightly disciplined schools, with children working in separate desks for the most part. The same applies to school $D$ which was formal also in its teaching methods with grammar work playing a large part in English lessons. On the other hand, music and drama played a large part in the curriculum of school D. Schools $B$ and $C$ were the only two in the sample
at which a uniform was worn. School E provided a contrast to the other four with free group work playing a large part in most lessons, and activity methods very much to the fore. The child-centred approach was much more obvious in school $E$ than in the other four.

In all, eight teachers were involved in the project. One of these was a student teacher on teaching practice for the first term of the project only. She was teaching at school A, and was succeeded in the summer term by the normal class teacher. Schools B and C provided one teacher each, each of whom was a specialist for French in the school, with the difference that teacher B taught Prench only, throughout the school, whereas teacher C had her own class as well as teaching French to other classes. The class at school $C$ was not teacher C's own class. School D provided two members of staff. Teacher Dl taught French to class D1 (the A set) as well as being the class teacher. He was in charge of French teaching in the school and also deputy head master. Teacher D2 taught the B set (called D2 in the experiment.) At school E there were also two teachers. Teacher El taught her own class, El, and teacher E2 taught classes E2 and E3, E3 being her own class. Teacher E2 was head of the French department. Teachers $A$ (student), $B, C$, D2, El and E2 were women teachers, teachers A and D1 being the only two men.

In training and French background the teachers differed to a marked degree. Teacher A(student) and teacher B were both graduates. Teacher A (student) possessed an ordinary degree from Edinburgh which had included French but apart from a short teaching practice of three weeks in the term before, she had had no previous teaching experience. Teacher B had
an Honours degree in French and German and had long experience in teaching French to all ages. Four of the teachers, C, Dl, El and E2 had all been on the one term course at the British Institute in Paris about three years before this project took place, and had subsequently been attending classes at the local Technical College as well. One of the teachers, Dl , had also attended the Besançon course which was the other course arranged within the context of the National Experiment refered to in Chapter 1 of this work. Finally, this left teachers A and D2 both of whom had French to "O" level, but who had no specific training to teaching French. Both had been attending courses at local Technical Colleges for a short period.

Except for Class B, which contained only 24 pupils, the classes ranged in size from 37 to 44 , thus covering the normal sort of range for primary schools. The exact figures are set out in Appendix D, page 290, together with the figures for age and sex. As can be seen, most classes had a fairly even balance between boys and girls except Class E2 where there were almost twice as many boys as girls. The age factor proved a problem at school A, as will be seen in more detail when the children's French experience is considered, for the class was in fact a double age-range class, with 24 children in the 10 to 11 age group and 13 in the 9 to 10 group. Separate figures for the two groups in the class are given. The only other class with any unusual age factors was Class $B$, in which three girls fell outside the normal range. Two of these were respectively three and five months older than the oldest children in the rest of the sample,
and one was five months younger than the youngest child in the $\therefore \mathrm{C}$, $D$ and E classes. All other pupils in the sample - 286 of them, the overwhelming majority - were born within the official limits for their year, that is to say between September, 1956 and August, 1957 inclusive. They were therefore aged from ten-years-and-five-months up to eleven-years-and-four-months when the experiment began in January, 1968 and the average age for the whole sample was ten-years-and-ten-months. As is described in the next chapter, the three attainment tests used in the pre-trial were administered to the sample fairly early on in the experiment. The averages and standard deviations for the complete classes are given in Appendix D, page 291. In each case the standardised mean and the standard deviation is 100 and 15 respectively. It can be seen from these tables that for all three tests the sample group as a whole achieved a higher average than the 100 standardised for the test with the differences ranging from 4.5 points on the English Progress test to 2.4 points on the primary verbal test. From the point of view of the experiment one would like to assume that these differences could be explained by chance and that the sample was in fact typical of the primary school population as a whole as far as ability measured by these tests is concerned. If this were the case one would then feel more free to generalise about the teaching of French reading in all primary schools on the basis of tests given to this sample. In order to safeguard against unjustified conclusions one would have to be fairly sure that these higher mean scores are purely chance occurrences, and it seems wise therefore to test these differences for :significance at a low level, say . 10 , or .05 at the very highest. In fact it turns out
that the EPC2 result is significant at the . 001 level, the NV3 result at the . 01 level, and the PV3 result at the .05 level. It is clear therefore, that on their measured English and non-verbal reasoning ability the pupils in this sample are on average more able than the primary school population generally, and the same statement can be made fairly confidently about their verbal reasoning ability as well. Glancing at the scores for the individual classes will reveal certain obvious reasons for these higher averages. In all cases the presence of the $D$ school A stream (Class Dl), without a balancing C stream, has pulled the average up. The high score from class $B$ on the Fnglish test is very probably explained by the professional and business home backgrounds of many of the pupils at that school. Although none of the other means for individual classes are significantly different from the standardized mean, it is interesting to note that the three E classes alone are consistently close to the figure of 100. The standard deviations are also different from the standardized value of 15 , and this is especially true of the English Progress test. In this case the lack of spread is accounted for if one examines the marks obtained in, say, block diagram form. '. It then becomes clear that, as one might expect, there is a lack of higher and lower value scores over the sample as a whole. This is especially true at the lower end of the scale, and it can be said that very few pupils in the whole sample scored really badly on the English test. Once again it is interesting to note that it is the E classes that come nearest to the standardized value of the standard deviation. These three classes must therefore be regarded as most typical of the primary school population as far as ability assessed by these tests is concerned.

Ignoring class B, the average for boys and girls on these tests were:-

## EPC2 averages

|  | Class <br> A | Class <br> C | Class <br> D1 | Class <br> D2 | Class <br> E1 | Class <br> E2 | Class <br> E3 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boys | 103.3 | 104.1 | 108.3 | 104.9 | 95.7 | 98.7 | 101.8 | 102.3 |
| Girls | 104.7 | 100.9 | 110.6 | 104.7 | 101.9 | 100.5 | 105.5 | 104.5 |

NV3 averages

|  | Class <br> A | Class <br> C | Class <br> $\mathrm{D1}$ | Class <br> D 2 | Class <br> E1 | Class <br> $\mathrm{E2}$ | Class <br> $\mathrm{E3}$ | Total <br> Boys <br> Girls |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 97.3 | 108.2 | 111.0 | 108.2 | 96.1 | 103.1 | 104.4 | 104.0 |  |

PV3 averages

|  | Class <br> A | Class <br> C | Class <br> $\mathrm{D1}$ | Class <br> D 2 | Class <br> $\mathrm{E1}$ | Class <br> E 2 | Class <br> $\mathrm{E3}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boys | 100.3 | 105.1 | 112.9 | 101.4 | 95.6 | 101.2 | 100.8 | 102.4 |
| Girls | 98.9 | 98.8 | 112.4 | 98.3 | 97.8 | 99.8 | 104.5 | 101.8 |

For the total sample, the boys have done slightly better than the girls on the last two tests, and the girls have done better than the boys on the English Progress test. None of these differences is significant. (2.) Adding in the girls in Class B improves the girls' average on the first and last tests, and in the case of the English Progress test, the
difference is now significant at the . 01 level.

The two halves of class A were also compared and the results were
as follows:-

|  | $9-10$ <br> year olds | $10-11$ <br> year olds |
| :---: | :---: | :---: |
| EPC2 | 109.0 | 101.43 |
| NV3 | 104.4 | 94.7 |
| PV3 | 106.5 | 95.7 |

In each case the younger section of class $B$ has achieved a higher score than the older section, and the differences are significant at the . 05 level.

As far as special home backgrounds are concerned, the sample did not appear to be very unusual. Teachers A and D2 actually mentioned one or two pupils with difficult home backgrounds, and class $C$ contained five children from the Home mentioned above. No other classes reported any special cases. Reading difficulties were reported in respect of one boy in class $C$ and four pupils in the E classes. These were the only classes affected; and teacher $B$ reported most firmly that there were no bed readers in class B. Three children had linguistically interesting home backgrounds. One of these, a boy in E2, had a French mother. The other two, both in class $C$, had no direct French connection. They were a girl with a Yugoslav mother and an English father, who addressed the child in their own Mother-tongue and each other in Italian; and a girl with a Maltese mother.

The most important French linguistic influence for the pupils in the sample was naturally the course that they had been following and the length of time that they had spent on it. Here once again there were
large dif'ferences between classes. Class A's ten to eleven-year-olds had started at the beginning of the third Junior year on Nuffield but had soon afterwards switched to an introductory course designed and used within County Durham called "Children Speak French". They had exhausted this course by the end of the third year, but had not embarked on anything new in the first term of year four because they were waiting for the Viens Lire course. The nine to ten-year-old group had had only one term's French, which had largely involved work on the "Children Speak French" course. This did not really seem a long enough period of oral experience before embarking on a reading course. All the other classes had had at least four terms' French before starting on the course. Class B had reached lesson 20 of Bonjour Line in the middle of the previous term, but had not proceeded beyond this point because teacher $B$ did not wish to introduce the passé composé (perfect tense.) Instead they had been doing informal oral work for half a term. Class C had started their third junior year with the Mary Glasgow course Bon Voyage, and in the September of their fourth year had transferred to the Nuffield course at Unit 14. By January, 1968 they had reached Unit 22. Class DI had done a very little French at the end of their second junior year. In the third year they had embarked on Bonjour Line, and had reached lesson 22 by January, 1968. Class D2 had had a less successful time. They had spent one year on Bon Voyage before transferring to Bonjour Line, and had only reached Unit 5 of this course. The E classes had all started on Bon Voyage, and after two terms had transferred to Bonjour Line. They had now reached about Unit 13. What this means is that all classes, except the young group in class A
had had the suggested length of experience in French teaching of four terms to one-and-a-half years. Two classes were unsatisfactory in the amount of French covered. These were class A, older group, who had not progressed beyond what was in essence a beginners' first year course; and class D2, which had only reached lesson 5 of Bonjour Line, whereas the reading course was based on the first 15 lessons. Apart from these factors covering the whole of the sample, there were nine children who were special cases. Four of these, two in class D2 and two in El , had just joined their respective classes from other schools with no knowledge of French whatsoever. Four others, two in cless $C$, and one each in classes E2 and E3 had only one term's French experience, one child in class $B$ was having coaching in French reading and writing for an entrance examination.

So far it appears that the sample contained a very good cross-section of school types, classroom situations, teachers, courses and pupils. This of course, is pleasing since one aim of the experiment was to see how well the teaching material suited the ordinary classroom teacher in normal classroom surroundings, and how well the pupils could learn from the course if no special experimental conditions were present. A wide range of teaching situations would make it safer to generalize from the results obtained from the sample. Before moving on, however, it would be worthwhile to take another look at each class one-by-one. No teaching situation is ever completely like another, but in the case of this sample it could very easily be asserted that about half of the classes qualified, at the start of the experiment, for the description "special case".

Class A perhaps stands out as the class with the most disadvantages for beginning to learn to read French. The most outstanding fact is obviously the lack of experience of the younger group, which could not be made up for entirely by their greater intelligence. It can equally be claimed that the experience of the older group was not entirely satisfactory, based as it was on a beginners' course. Class A was also at a disadvantage with regard to teaching staff most especially because they had a different teacher for each of the two terms of the experiment. Examining the teachers themselves, one discovers that one was a student, and the other not specifically trained for French teaching. Finally, for class A there was the home background, which may not always have been educationally orientated. Another class which was at a disadvantage, though not to the same extent is class D2. A glance at their I.Q. results shows them to have been slightly above average on the whole, and their home background was probably slightly better than that of pupils at school A. However, they too, it appears, had not covered the full amount of oral groundwork necessary before going on to the reading course, and their teacher, like the full.-time one at school A, was not specially trained for teaching French. At the other end of the scale, class B had obvious advantages. The children came from educationally orientated home backgrounds. They had adequately covered the necessary oral work, and had a well qualified teacher. Their ability in English was well marked, and suggested that they should be at least moderately competent in linguistic expression generally. Finally, this was the smallest class in the group. The other class which seemed to have particular advantages was class Dl ,
which was in fact the second largest class in the group. Like class B, class D1 had adequately covered the ground necessary, and teacher Dl was among the better qualified of the non-graduates in the sample, having been to both the British Institute and the Besançon course. Most important of course, is the fact that this was an $A$ set. One would therefore be more than surprised if the results from this class were bad.

This leaves class $C$ and the E. classes. Class $C$ was an intelligent class with a well qualified teacher, though containing a number of children with difficult home backgrounds and unusual parental combinations. The classes at school E remain as the most "normal" of the eight, on nearly all counts. Their I.Q. test results are most close to the standard. They had practically covered most of the necessary oral groundwork for starting French reading. There were few difficult home backgrounds, though one or two children had reading problems. I'he two teachers were well qualified, though not graduates. In the circumstances one might expect the most "average" results to come from these three, perhaps four, classes. Looking at one or two of these classes, especially perhaps classes $A$ and $B$, one might at first be tempted to exclude their results from the final analysis, on the grounds that they are bound to introduce a bias one way or the other. Looking at the whole group however, it is soon apparent that reasons of this sort could be found for excluding several of the classes. In the circumstances, the strong seem to balance the weak fairly accurately, and therefore it seems best to leave the sample as it stands. At the same time in some circumstances closer analysis of individual class results may well be justified.

## Notes to Chapter 10.

(1) This Experimental sample, whose progress was studied in the first two terms of 1968, is occasionally referred to as group 1968E.
(2) See Appendix D, page 291.

## Chapter 11.

## The Experiment in Progress

This chapter will be concerned with three things. Firstly, it will outline the amount and the speed of progress made by the various classes in the sample. Secondly, it will describe the classroom situations as they affected the use of the course in the various schools. Finally, it will outline the work done by the author during the course of the experiment. The facts revealed in the first two parts of this chapter stem largely from the observations made by the author in the individual classes themselves. The schools were issued with their copies of the courses in the week preceding the briefing meeting on Wednesday, 24th January. By the meeting, all eight classes had embarked on at least the colour strip of the first unit, and some, notably classes B, C and Dl, had tackled the black-and-white strips as well. At the briefing meeting it was made clear that the course should be taught as naturally as possible, and without too much concern for the fact that this was a research project. Teachers should spend as long on any particular stage as they thought necessary, and no longer. It was thought initially that the course would fit fairly easily into two terms. As it turned out, this was not the case, and only two classes actually reached the end of the course. (This meant that only two classes were tested on testing Unit C.) The progress of the various classes is best understood from a table, and this is set out on page 134 . In all, the various schools had 23 weeks at their disposal, except class B which had one week more holiday as marked. The line marks the Easter holiday gap.

The outstanding fact to be obtained from this table is obviously the very fast progress of class Dl , which completed the whole course in the 11 weeks of the first term. Teacher Dl felt it was necessary to keep these A stream pupils stretched, and he was also convinced that they would be able to cope adequately with the demands he was making on them by taking the course at this speed.

## Progress of the Teaching

Unit reached, according to the number of weeks elapsed

| Week | $\underset{\mathrm{A}}{\text { Class }}$ | $\begin{gathered} \text { Class } \\ \text { B } \end{gathered}$ | $\underset{\mathrm{C}}{\text { Class }}$ | $\begin{gathered} \text { Class } \\ \text { D1 } \end{gathered}$ | $\begin{gathered} \text { Class } \\ \text { D2 } \end{gathered}$ | $\begin{gathered} \text { Class } \\ \text { E1 } \end{gathered}$ | $\begin{gathered} \text { Class } \\ \text { E2 } \end{gathered}$ | $\begin{gathered} \text { Class } \\ \text { E3 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\ldots$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 |
| 3 | 2 | 3 | 2 | 4 | 3 | 2 | 2 | 3 |
| 4 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3 |
| 5 | 3 | 3 | 3 | 5 | 3 | 3 | 3 | 3 |
| 6 | 3 | 4 | 3 | 5 | 3 | 3 | 3 | 3 |
| 7 | 4 | 4 | 4 | 6 | 4 | 4 | 4 | 4 |
| 8 | 4 | 6 | 4 | 7 | 4 | 4 | 4 | 4 |
| 9 | 5 | 6 | 4 | 8 | 4 | 5 | 5 | 5 |
| 10 | 5 | 6 | 4 | 9 | 5 | 5 | 5 | 5 |
| 11 | 5 | 6 | 5 | 9 | 5 | 5 | 5 | 5 |
| 12 | 6 | - | 6 |  | 6 | 6 | 6 | 6 |
| 13 | 6 | 7 | 6 |  | 6 | 6 | 6 | 6 |
| 14 | 6 | 7 | 6 |  | 6 | 6 | 6 | 6 |
| 15 | 6 | 7 | 7 |  | 6 | 7 | 7 | 7 |
| 16 | 6 | 7 | 7 |  | 7 | 7 | 7 | 7 |
| 17 | 7 | 8 | 7 |  | 7 | 7 | 7 | 7 |
| 18 | 7 | 8 | 7 |  | 7 | 7 | 7 | 7 |
| 19 | 7 | 8 | 7 |  | 7 | 7 | 7 | 7 |
| 20 | 7 | 8 | 8 |  | 7 | 8 | 8 | 8 |
| 21 | 7 | 8 | 8 |  | 8 | 8 | 8 | 8 |
| 22 | 8 | - | 9 |  | 8 | 8 | 8 | 8 |
| 23 | 8 | - | 9 |  | 8 | 8 | 8 | 8 |

Occasionally in fact, he abandoned the tape and gave the dialogue himself, in order to maintain the pace. The other immediately obvious fact is that only one other class, class C, actually finished the course, and this was possible only by squeezing the last two teaching units and the last testing unit into the last nine days of texm. The one other class that nearly reached the end was class $B$ which reached Unit 8 by week 17, but which was then unable to reach Unit 9. The end of both terms proved understandably difficult times for making progress with the course for all classes. Equally understandably the summer terms showed a great period of slowing down for all classes, with only three units covered in 12 weeks, compared with at least five units covered by all classes in the eleven weeks of the spring term. One other interesting fact is that class D2, the E classes and to a lesser extent classes $C$ and $A$, all kept to much the same speed of teaching, with class $B$ going marginally faster, and class A slowing down towards the end.

As far as length of time spent on the various sections of a unit is concerned this varied a good deal from unit to unit, and from the first term to the second. In general though, it seemed that most teachers were spending one, two or three lessons on making the children familiar with the oral material presented on the tape and the colour strip. Normally only one lesson would be spent on the first black-andwhite strip, (the A strip), but having completed the B strip, with writing on both frames, several lessons of class work with teazlegraph and other activity would normally follow before the final wordsmonly strip was shown. Between this strip and the beginning of the next unit several more class lessons would follow, often not related to the
reading course directly. For one unit this whole process took about nine or ten lessons, that is about two weeks, in the first term, and this tallies with the table given on page 134. The longer periods taken up in term 2 are explained more by lessons being lost for other activities than by more time being needed for the course itself. The amount of time available for teaching the course in any given week varied from class to class. A rough guide to each class's time-table is set out below:-

| Class | No. of <br> lessons <br> per week | Length <br> of <br> one lesson | Morning <br> lessons <br> per week | Afternoon <br> lessons <br> per week | Total time <br> per week. <br> (minutes) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 5 | $30-40$ | 1 | 4 | 175 |
| B | 4 | $35-40$ | 3 | 1 | 145 |
| C | 4 | 30 | 3 | 1 | 120 |
| D1 | 4 | $35-45$ | 0 | 4 | 170 |
| D2 | 4 | $35-45$ | 2 or 3 | 2 or 1 | 170 |
| E1 | 4 | $30-35$ | 3 | 1 | 125 |
| E2 | 4 | $30-35$ | 2 | 2 | 130 |
| E3 | 4 | $30-35$ | 2 | 2 | 130 |

The time available varied from only 120 minutes for class $C$ up to 175 minutes for class A. Just as important as the amount of time available is the time of day of the lessons, especially with the subject where one is trying to form habits. Ideally, one would have liked more morning lessons, and the situation of class Dl is particularly regrettable; three of their four lessons were not only in the afternoon but were the last lesson of the day as well. With this exception, the
majority of lessons fell either in the mid-to-late morning period, or in the early afternoon. The different figures for class 2 are due to the fact that their Friday lesson could be taken either in the morning or in the afternoon.

On examining the situation within the classroom itself, the first thing that drew attention was the ease or difficulty with which the room could be set up for the lesson, and the general suitability of the room being used. At one end of the scale was class D2. Here there was no blackout for film work, and a cardboard shield had to be set up at right angles to the screen to improve vision. This meant that the whole class had to squeeze into the right-hand half of the room, which was furnished with old style double desks with fixed seats. The result was that the pupils had to sit in cramped conditions which cannot have helped the teaching process. Most of the other classes had adequate or good viewing facilities. Classes A, E2 and E3 also had to move, this time forwards, to see the screen, but having separate chairs this did not cause any problem. Nor did the situation in class El, where the children had to move their chairs to the back to watch the pictures on a back projection screen which made black-out unnecessary. Classes C and Dl both had back projection screens, and fixed desks, which were more of a disadvantage for class $C$ since the room itself was very small. Class $B$ fitted easily for the whole lesson into the front three rows of a wide room, and could see the screen without difficulty. In schools $D$ and $E$ sharing of the one set of material between two or three classes could have caused major problems. The E teachershad avoided this altogether by duplicating the teazlegraph material, and by careful planning. In the case of school $D$, where twice a week the
two classes were taught simultaneously, there was no problem concerning the tapes and slides, since class D1 soon outstripped D2, but it did appear on one occasion as if the sharing of teazlegraph material was proving a problem, with D2 lacking certain words it needed. The author was able to visit each school at least once for the purpose of seeing the course in action, and from this a general impression was obtained of each teacher's strengths, weaknesses and attitudes both to French itself and the pupils. These general impressions were extended by conversations with teachers on subsequent occasions. However, it was not possible to gain enough information on every teacher to make it possible to compare them all across the board in every aspect of their teaching practice. What follows therefore is a short, sometimes extremely brief description of each teacher in action. Teacher A (student) was seen only once for a short lesson. She seemed to have established a reasonable working relationship with the children and taught the lesson, which was the first showing of a colour strip, very adequately, using French throughout for explanation, questioning and instructions. On the whole, the situation seemed satisfactory. Regrettably it was not possible to visit teacher $A$ who took over during the summer term. The children in class A seemed quite happy and responded well.

Class B were an extremely willing and lively class, but well controlled by teacher B, who used French for most of the lesson, only employing English to explain any difficult new procedures and the like. The teacher reported that the pupils did quite a large amount of acting out of situations which they enjoyed. It was clear that the attitude
of the teacher both to her subject and to her class was extremely favourable, as was her grasp of French. In class $C$ there was an atmosphere of firm discipline, which was typical of the school as a whole, with children standing to answer questions, and little idle chatter taking place. In general, the teacher's relationship with the children seemed good. In her French teaching, teacher $C$ did use a certain amount of English, though French was used to give standard instructions.

Teacher Dl also kept the classroom atmosphere fairly formal, though not to the same extent as teacher C. In his French teaching he was also formal, with elements of grammar method, such as learning paradigms of verbs, appearing alongside more usual audio-visual techniques. In classroom teaching the main language used was French, which teacher DI obviously felt reasonably at home with. By contrast, teacher D2, with no specific training for French teaching, was obviously at a disadvantage, and this was made manifest in the facts that she made considerable use of English, and that the pace of the lessons was very slow. She did not always prepare the ground well, of'ten omitting to give the children examples of what she wanted from them. They were especially unsure, mainly for this reason, about giving examples of words containing a given sound. If a pupil made a pronunciation mistake, teacher D2 would often shy away from giving the correct pronunciation herself but would either try to find the place on the tape again or ask another pupil to correct the error, and, as often as not, the second pupil would merely repeat the same mistake. In general this teacher was unwilling to present herself as a linguistic model for the children, and in view of her lack of training, this was understandable. She was the only
teacher in the sample who regularly asked the author for advice, not only about teaching the course but also about French teaching in general. On the other hand, her relationship with the children was very good, and despite a certain formality in the atmosphere of the school, it was obvious that teacher and class were quite at home with each other. Both E teachers allowed their children a certain amount of disciplinary latitude in conversational work, though they could both maintain the necessary silence and concentration needed for certain stages of the teaching. Both were competent in French, which they used for the greater part of the lesson, using a good colloquial form. Teacher El especially showed an ability for dramatising situations. Thus, to consolidate the meaning of the word "âne" ("donkey"), she had a boy bending over ("Voilà Michel, il est l'âne."), and then called upon a girl to mount hirn ("Anne, monte sur l'âne."), which she did to the delight of the class.

Obviously, in the above description, much has not been covered. In general, the teachers were reasonably confident of their French and of their relationship with the children, some outstandingly so. Of these, teacher $B$ fits into both categories, teacher Dl certainly into the first, and teachers El and E2 certainly into the second. Averaging out over the eight teachers, it is probably fair to say that the teaching was done competently throughout the sample as a whole. Two teachers in particular also found ways of using the teaching material in new ways, not actually suggested in the manual, and two classes went on to extend their French reading experience by other means. Teacher B developed a series of new situations, using mainly words and phrases
from the course, which pupils in the $B$ class read from the board or acted out. Teacher Dl also encouraged reading of parts, firstly by allowing two children to read from the two copies of the course provided, and, when this proved inadequate, by having the last four texts duplicated so that every pupil in the class had a copy. Both of these activities encouraged the pupils to see reading as a
meaningful activity. Teacher Dl had a problem in the summer term, having finished the Viens Lire course in one term, but the B.B.C. provided the answer in a well-filmed series for final term primary school French learners, called La Chasse au Trésor. The work book accompanying this course involved some reading and also some writing, which the children coped with quite well. Teacher Dl also tried them out on a series of simple French readers. (1.) Teacher D2 found that her pupils were bringing French comics to school, and made a display board for them labelled "Regarde ici-Voici un livre". Unfortunately the children did not understand very much of the text of the comics, but were quite pleased to identify the occasional word. As far as possible then, the teaching situation was kept normal, with the teachers using all of the Viens Lire material in the manner specified by the research project, but doing so each in his own way, and developing his own follow-up and further teaching situations according to the needs of the partiolar class. The role of the author as research worker in the classroom was kept to a minimum, in order not to disturb the natural situation. As has already been mentioned, a limited number of visits were made for the purpose of assessing the teaching situation, but in only two cases
was a class visited more than once for this purpose. The two exceptions were classes D1 and D2 which had two and three such visits respectively.

A larger number of visits were made with the specific purpose of administering the various tests, which were given at the schools themselves, in the children's normal clessroom setting, which, for the most part, proved very successful. As far as possible, all tests were administered by the author, in order to exclude undesirable variations in the results. In all, 42 test sessions took place, that is to say, three attainment tests and the first two Viens Lire tests to all eight classes, plus the third Viens Lire test to two classes only. Out of 24 attainment test sessions, six were administered by teachers after discussion with the author. These were the English progress test with classes D1, E2 and E3, the non-verbal test with class A and the primary verbal test with classes E2 and E3. An examination of these six tests shows that their results are in line with those obtained for other classes on the same tests, and by the same classes on other tests. Of the 18 Viens Lire tests administered, only two were administered by a teacher. These were tests VLA and VLB With class E2, which were each administered by teacher E 2 after having watched the author administer the same test to class E3 in the preceding lesson. Once again the results do not appear to have been greatly affected.

The question of timing was another important factor as far as the tests were concerned. As far as possible they were adninistered in the morning rather than the afternoon, though this was not always possible. Of the

24 attainment test sessions, eight occurred in the afternoon: all the sessions at school $D$, and the non-verbal sessions for classes El and E2. The VLA and VLB sessions at school D were also afternoon sessions, but all other Viens Lire tests were administered in the morning. Fortunately few other extraneous factors affected the testing sessions. Class E2 boys took the non-verbal test just after an afternoon football match, and produced their best test result, which was better by four points than the E2 girls' average. On the Viens Lire tests, which were administered with the same tapes as had been used in the previous year, there was very little trouble, except at school A , where the tape reproduction was poor for both tests. This stage of the research programme, that is the trial of the material in the classroom conditions was completed in July, 1968, and the results were assessed. What they revealed is described in the next section of this thesis, together with an outline of the reactions, comments and assessments made by the teachers themselves and remarks of pupils that were passed on by teachers. Although these two terms provided the majority, and the most useful, of these results the project did continue for one further term, that is to say, the autumn term of 1968 , with a new batch of children in the same classes. The results collected from this batch, which were based on only one term's work, are described in Chapter 14 of this thesis and provide a useful second check on the main batch of results.

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## Notes to Chapter 11.

(1) The Jacques et Claire series by Rice and Claxton, published by Macmillan.

PART IV
THE RESULTS OF 1967-1968

Chapter 12.

## Opinions and Impressions

The next two chapters deal specifically with the results of the first batch of children, since the second batch is described in a separate chapter later on. However, the subject matter of this chapter is not of a specific nature, and for the sake of completeness, it has seemed best to include all comments from the teachers, whether they occurred in the first two terms of 1968 or in the last term, in this one chapter. It has been decided to deal with impressions and comments before moving on to the test results, firstly because they relate more obviously to the teaching situations described in the previous chapter, and secondly because, although they are themselves no more than opinions and chance observations, they do point to certain specific problems which are dealt with more fully in the tangible test results. The first factor to be considered is the reaction of the teachers and children to the course itself. This was largely favourable. Teacher El found that, like so many audio-visual courses, it involved hard work on her part, which however, she did not begrudge. The headmaster of school A was still happy with the course at the end of teaching unit 4, and stated that the children were interested in it. leacher DI also appreciated the interesting stories, which made his job easier, and later stated that this was the sort of course that he wanted. His children had enjoyed saying "Que tu es bête", to one another at the end
of unit 7. Several teachers commented that the course had re-aroused their pupils' interest in French. Criticism of the course centred largely around the speed of presentation within an individual unit. Very much a minority problem was the speed of presentation of the tape material, and, in particular, the length of the pauses. These were found to be too long by two classes, B and Dl, but all other classes had no complaint on this score, so this can probably be ascribed to the higher ability of the pupils in these two classes. A much more general complaint concerned the black-and-white follow-up strips. It was felt generally that these were far too thorough, and lacking interest. Teacher El summed up the problem by saying that the children saw the same story too many times. As a result of this, they not only became bored, but also too familiar with the text, so that they only needed to look at the first few words to know what the entire sentence said. As a result they often did not focus on the last word of a sentence. For this reason the second half of the "C" strip was useful since it forced the children to concentrate on more than the first few words only. Most teachers suggested, as a solution to this problem, omitting the "B" strip (picture plus words; words only) which they felt did not get them much further forward. A minority felt that the "A" strip should be abandoned instead. Teacher E1 had her own solution to the problem which was to replace the "B" strip with a new story, using the same words as in the original passage, but re-arranged so that the children would have to apply their brains again. The only other aspect of the course which attracted comments from teachers was the teazlegraph material. Most teachers felt that it was
badly organised, which in fact it was.. However, teacher D2 did find it useful for the interesting reason that she found that it enabled her pupils to see more easily how a French sentence was put together from individual words.
'Teacher $B$ had a long conversation with her class at one stage about the course, and one of the points that they raised was the repetition of the same material in the black-and-white strips already mentioned above. Another interesting question asked by the same class was why they could not have started with a book. The teacher made a good case in simple terms, on the basis of their familiarity with the audio-visual methods, and the greater vividness of the approach. It was an interesting question however, and suggests that the children did not consider that what they were doing was reading in the "real" sense of the word, and if this is the case, then it is a further argument for introducing the pupils to simple but interesting French readers as soon as is practicable. Comment on the tests centred largely on the second type of test, and particularly on the first of these, VLA 2. Teacher B identified the main problem by pointing out, as the author of this thesis did in Chapter 6, that the test was really testing writing, something that the children had not in fact been taught. The shape of the test had already been determined by the needs of the project however, and as a measuring tool it was known to work reasonably well. Two other criticisms were made of test 2, by teacher $B$ and by others, including the heads of schools $A$ and E. The first of these was that the spaces for writing in the answer were too cromped. The second was that the single reading of the sentence did not give the children long enough to hear and then write down all the words concerned. Their difficulty was high-lighted by comments from
some of the pupils themselves. One child from school E had written "No, I can't hear" at the bottom of test 2. Class A agreed that test 2 had been more difficult than tests 1 and 3. At school B, several pupils had found the unknown words (the words in the test that had not occurred in the course) especially difficult because they had not known what they were writing about. One of the brightest boys in class Dl had analysed this problem of the unknown words as follows: "on the unknown words I got the first two, scratched around for the third, and then forgot the fourth." On the whole, all of this is fair comment on a particularly difficult test, but it need not invalidate the results obtained.

Perhaps the most useful observations made both by teachers and by the author concern the progress or otherwise of the children themselves. The first group of observations are of specific mis-pronunciations. Although the author made 11 classroom visits it is significant that very few reading mistakes were spotted. Of the ones there were, certain would be recognised by both primary and secondary teachers as very common ones, especially from children who have first learned by the oral method. Thus teachers E1 and E2 both reported that the word $/ j e /$ was beginning to be read [3e] as though it were the word / $j$ 'ai/, and this mistake was reflected in the results of testing unit VLB after teaching unit 7. Class D2 produced quite a number of mistakes on one visit. One of these was another common one, /il a/ being $\operatorname{read}[i l e]$ as though it were /il est/. It could be that the children have already, long before the teaching course, made up the spelling /il a/ for [ile], /a/ representing the nearest English equivalent sound to /est/. Or, it could be an instantaneous mis-reading. Other
problems were nasals (/compte/ read as [kJmpt], or as [kJ̃pt]); silent endings (/t/ pronounced in /buffet/); and silent/-ent/ being pronounced. That all these mistakes are being made even after teaching with the Viens Lire course is disappointing, but it should be noted that the majority of instances came from class D2, whose teacher was the least confident of the eight. The question of confidence with relation to class D2 is interesting, for they produced a phenomenon which was not reported for any other class in the sample. The children, whose oral background was weak, were very unsure of themselves when asked to perform, whether repeating or acting, from the coloured strip. But as soon as they could see the written word, they became much more confident and forthcoming. This strangely parallels the same class's reliance on teazlegraph material for understanding sentence structure, which was mentioned above. Another problem which was high-lighted by an example of mis-pronunciation was the problem of the non-readers. This was felt particularly acutely by teachers El and E 2 with their unstreamed classes, and on one occasion teacher EI reported that her worst non-reader had mis-read the English word /chatter/ as [ $\left.\int a t_{\theta}\right]$, obviously on the basis of the French orthographical rules. It is interesting to note that the French convention had made a greater impact on him than the English, which suggests that the course may not have been without some effect, even for a non-reader. In fact, teachers El and E2 reported some initial success with non-readers, who were able to perform quite well on the first two units of the course. They were even able to recognise sentences in the jumbled version of the C film strip, but it was later
obvious that even here they were relying on memory of the story, for when they were confronted with the teazlegraph material they were not able to read it. By the end of unit 3, it was obvious that the weaker English readers were beginning to drop out, and by unit 4, they definitely had done so. Both E teachers therefore decided not to bother about those non-readers but to concentrate on the middle and top of the ability range.

At the other end of the scale, teachers El and E2 had problems with their really bright children. It was clear that these children could grasp the point on the first showing to them of the written forms, but then had to put up with another four or five lessons for the benefit of the less able pupils and the average pupils. In other subjects, this could be overcome by group-work, but so many factors in this present teaching militated against this. Teacher Dl pointed to the obvious advantages of streaming for teaching French, and especially French reading, and teachers E1. and E2 were both aware of this.

For the broad mass of children teachers reported successful results. The D school A set naturally seemed to do particularly well. After unit 3, in which 0 and EAU are taught, teacher D] wrote up the two previously unseen words /le dot/ and /le rideau/ on the board and two boys read them with no difficulty. On another occasion, teacher Dl demonstrated the pupils' reading abilities to a visiting H.M.I. by means of a C strip, and made the point very quickly. The children obviously had no problems at all. Class $C$ also read sentences from strips 1C and 2C around the class shortly after completing uni.t 2,
and only two pupils made mistakes. Even in class D2 the majority were coping adequately. Thus on the first showing of the $B$ strip of unit 2, a number of mistakes were made, but most of these were eljminated on the second showing a few minutes later. One curious but revealing episode was reported from class B. By accident the teacher put the $B$ strip of unit 1 into the projector at the wrong end. As a result what appeared on the soreen was the last frame, words only, but upside-down. Out of interest the teacher asked the children what it said. Many of the class read the sentence with no difficulty, and with no hesitation. They did not have time to work out logically that this must be the last frame, and therefore the last sentence. They must therefore have recognised enough of the sentence, even in this curious position, to produce the correct reading of it. This serves to emphasise the point made by teachers that children are very familiar with the text of the story by this stage. It also shoms how effective the look-and-say method is - the children did not need to work at the letters one-by-one, even when they were upside-down. The description contained in this chapter should not lead one to expect any particular measure of success from the sample as a whole. However, it does focus attention on certain specific problems. Firstly, there are the graphemes themselves. Which of these, if any, are still causing difficulties? Then there is obviously the problem of the backward reader in English, and at the other extreme, the problem of bright children in unstreamed classes. One must also ask whether length of oral experience really has made a difference for class $D 2$, and class $A$. The questions are covered as far as is possible in the anolysis of results in the following chapters.

Chapter 13.

## The Achievement of the 1968 Sample

For the whole 1968 sample, the results of five tests were available. These were the three attainment tests, EPC2 (Engiish), NV3 (non-verbal) and PV3 (verbal) and the first two testing units for the Viens Lire course, VLA and VLB. These last two tests were in turn divided into three parts, VLA1, VLA2, VLA3, and VLBl, VLB2 and VLB3. As well as these results, there were also the results of the final testing unit VIC, which were available for two classes only, $C$ and Dl. This chapter is largely concerned with the results of tests VIA and VLB; with the comparison of these resul.ts with those achieved by the previous year's two experimental classes and with the control group results; and finally with an internal analysis of the results achieved by groups within the 1968 sample. The main emphasis will therefore be a quantitative rather than a qualitative comparison, but it will be useful, especially later in the chapter, to bear in mind the different approach of these three types of tests: VLAI and VLB1 involved finding the words printed which represented words spoken; VLA2 and VLB2 demanded completing unfinished words in a sentence after hearing the sentence spoken; VIA3 and VLB3 involved recognising two written words with the same sound without any spoken stimulus. The average results for the two groups of tests are set out in Appendix E, page 296 , together with the results from the previous year's two groups. It will be seen that the results for the 1968 experimental group are lower in every case than the results of the control group and the results of the 1967 experimental group. In every case these differences
are significant beyond the . 01 level. In other words the 1968 sample has done worse overall, on every test, than the 1967 experimental sample and the grammar school control sample.

Each comparison is worth analysing more closely. Talcing the difference between each group in turn, one must ask the question; what differences existed between the two situations that could explain this difference in achievement? As far as the difference between the 1968 and 1967 experiments is concerned, there are probably five hypotheses that can be seriously considered. These are: firstly that the 1967 group was overall more intelligent than the 1968 group; secondly that the research student was generally a better teacher than the majority of teachers in the 1968 sample; thirdly that the children had a better oral French background than the 1968 sample; fourthly, that the Hawthorne effect, the awareness of being part of a crucial experiment, had influenced both the research student and her pupils to an undue extent in 1967; and fifthly, that the omission of the contrastive drills had deprived the 1968 pupils of an important aid in understanding French reading. The first possibility, that greater intelligence had enabled the 1967 group to achieve higher marks, itself raises certain preliminary problems. The question arises as to whether greater intelligence is more likely to produce higher scores on the French reading tests. There were reasons for thinking that it might not. For an example, it was found in the National Primary French Experiment by the NFIR that a large number of "low-ability" children had scored above average, and even above one standard deviation above the mean on the first batch of French (oral) tests. (1.) Kellermann also reported that "the linguistic
ability of each child was not proportional to his I.Q. and I did not find an obvious correlation between academic and linguistic gifts;" albeit this was an intelligent group. ${ }^{(2 .)}$ In the Durham experiment "I.Q." was measured through the three ability tests, EPC2 (English), NV3 (non-verbal reasoning) and PV3 (verbal reasoning), and it was possible to calculate the correlation co-efficients for each of these with various sections of the French tests. The figures are given in Appendix F, page 307. In every case there is a definite positive correlation between general intellectual ability and scores on the French reading test. In general the highest correlations are found with the English test on one hand, and the second of each batch of French tests on the other, and the highest correlation in the whole set is .67 for VLB2 with EPC2. It is possible to ascribe the positive correlation of scores for these two tests to a common intelligence factor which contributes to success on both tests. Even at this level however, this factor cannot be said to play such a prominent role in either test that one could safely use either test as a predictor for the other, except for very extreme differences in scores. The I.Q. scores of the two groups were in fact as follows:-

|  | EPC 2 | NV 3 | PV 4 |
| :--- | :--- | :---: | :---: |
| 1968 E | 104.2 | 103.4 | 102.4 |
| 1967 | 104.7 | 103.4 | 102.9 |

These means are obviously almost identical, and in fact, they are not significantly different at any acceptable level. Certainly, the differences are not large enough to explain the greatly higher French scores of the 1967 sample. It therefore seems reasonable to reject the "higher I.Q." hypothesis, at least to this extent: that none of
the intelligence factors measured by the three ability tests are likely to have contributed to the difference between the 1968 E and 1967 E scores.

The second and third factors are more difficult to assess. The hypotheses were that the 1967 research student may have been a more able teacher; or that the 1967 children may have had a better oral French background before starting the test. To say anything sensible about the first hypothesis one would need to have assessed teaching ability much more accurately than was possible in this experiment. However, if one had to match one teacher from the 1968 sample, against the 1967 research student, then it would probably be teacher B. Both were French graduates with a good grasp of the spoken language. Both used a lively approach, encouraging activity by the children within well defined limits. Both obviously held the children's interest. The main difference between them was largely one of experience. 'Ieacher $B$ had many years experience of French teaching, and was well established in her profession. The research student had only just obtained her Diploma of Education, and had as yet no full-time teaching experience.

Obviously, it would be erroneous to compare the results obtained by these two teachers as a whole, because other factors would lead to variations as well. However, it so happens, as was pointed out in Chapter 9 of this thesis, that both teachers had taught the course to equivalent classes at school B - that is to say class 1 of the 1967 sample, and class $B$ of the 1968 sample. A comparison of these two classes' results would therefore be a fair one, and might give some
indication of the teaching of these two teachers. At the same time, since these two classes had followed identical syllabuses prior to the experiment for their oral French (teacher B), it seems fair to take this as a comparison of oral background as well. What is intended then, is to compare the achievement of 1967 class 1 taught by the research student, with the 1968 class $B$, taught by teacher $B$, both classes being at the same school, with similar good French background, and both teachers being reasonably competent. The hypothesis is that these two factors - good French background and competent teaching - are most important in causing success on Viens Lire and only the lack of them has caused the majority of 1968 classes to do worse than the 1967 group. Because of the similarity of the two classes in these two respects one would expect to find no difference in French results. (Of course, other factors may create differences between the two classes.) Fortunately their ability test scores show that I.Q. can be ignored in the comparison:-

|  | EPC2 | NV3 | PV3 |
| :---: | :---: | :---: | :---: |
| 1968 (B) | 112.2 | 103.3 | 104.9 |
| 1967 (I) | 111.8 | 108.4 | 106.0 |

On a "T" test, two of these differences (EPC2 and PV3) are not significant at the .05 level. The NV3 result is significant at the . 001 level, but this is the test that correlates least well with the French tests. The high correlating EPC2 shows no signifficant difference even at the 0.25 level. The following are the French test results:-

|  | VLA1 | VLA2 | VLA3 | VLB1 | VLB2 | VLB3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1968 | 14.6 | 19.1 | 1.9 | 27.3 | 22.8 | 5.6 |
| 1967 | 16.0 | 29.4 | 2.7 | 31.3 | 26.3 | 7.3 |

In every case the 1967 class has done better than the 1968 class, and using Student's-T all the differences are significant at the . 001 level. Therefore, although the children's French background was similar in the two classes, the 1967 class has scored higher than the 1968 class. A better oral French background would not appear therefore, to be a major factor in the greater success of the 1967 group, though the argument is a tenuous one. On the question of teaching ability it is not possible to be so definite. The teacher selected to match against the research student may well have been the most suitable for the purposes of comparison. However, it is not possible to say that the difference between their respective teaching ability is insignificant, since there is no recognised way of estimating, let alone measuring, this, and in the circunstances no full estimate was made. It would indeed be possible to turn the tables and use the above French results to suggest that the 1967 research student was a better teacher than the teacher B of 1968. IThere is no satisfactory statistical evidence either way, and, at best, the question remains open.

Then there is the fourth hypothesis, which was that the simple fact of taking part in an experiment had affected both the 1967 teacher (the research student) and her pupils, and had thus encouraged them to perform better than they would have done in normal conditions. This argument can be countered by pointing out that the 1968 sample also performed under experimental conditions, and that these too affected both teachers and pupils. It affected the teachers because they had beon asked to teach the course in a certain way; because they were occasionally
observed whilst teaching, and because their teaching was being assessed and compared with the other teachers through the French tests. It affected the children for the last two reasons as well, though to a lesser extent. All this is true, but awareness of the experiment was even greater in the 1967 sample. The children were aware of a difference because the research student was not a member of the school staff. For the research student the involvement in the experiment was even greater, and the motivation to produce good results, to prove the course with which she had been working all year (and with which, incidentally, she would be completely conversant, unlike the 1968 teachers) would be all too strong. Once agin there is no quantitative data by which this hypothesis can be tested. Unlike the third hypothesis, however, there does appear to be a very strong suspicion that the main reason why the 1967 sample performed so well was because of the obviously experimental situation. Because of this one could claim that the scores of the 1968 sample represent more truly the sort of achievement that might be expected from the primary school population as a whole. This leaves the fifth hypothesis, namely that the omission of the contrastive drills left the 1968 experimental group at a disadvantage in comparison with the two 1967 experimental classes. Certainly there is good reason to suspect that the leaving out of part of the teaching programme is liable to influence the results one way or another, and the test results did produce evidence to support the suggestion that it was the 1968 classes who suffered from the change. $A_{S}$ this evidence is mainly linguistic it will not be introduced at
this point but will be lef't until Chapter 15. It must also be borne in mind that these drills were the only part of the course omitted, and that in every other way the major features of the teaching method were the same for the two experimental groups. All the same, one cannot exclude the possibility that this omission, together with the experimental nature of the teaching in 1967, go a long way towards explaining the greater success of the 1967 experimental group. In turning to the grammar school control population and the obviously higher scores that they have achieved, it is wise to remember the major diff'erences that exist between them and the two experimental samples. Pirstly, the grammar school group were approximately two years older than the primary school sample. Ihis means that their methods of learning were not the same; and the gramnar school population would be beginning to conceptualize, whereas the primary school sample were still learning primarily through acquisition of habit. Secondly, and following on from this, their French learning would have taken a different form: although they may have started with an oral approach, they probably started reading and writing much earlier than the primary school children. Thirdly, being a grammar school. population, they were on average more intelligent than the primary school sample. In fact they probably covered only the top $20 \%$ of the ability range, whereas the primary school sample covered practically the whole range. The total effect of all these differences is not easy to calculate. However some attempt was made to measure the extent of the greater success of the control group.

The first method was simply to mark of $f$ on a table the proportions of
the 1968 experiment group scoring above or below certain critical points of the 1967 control distribution - above plus one standard deviation, above the control mean itself, above or below minus one standard deviation. These figures are set out in Appendix $H$ and show that, whereas on a normal distribution, $50 \%$ of the population should lie above the mean, the highest figure achieved by the 1968 group on the control distribution is $42.6 \%$ on VLAI, and that for the other tests the figure is somewhere in the low twenties. Whereas only $16 \%$ should fall below one standard deviation below the mean, the actual percentage for the 1968 group on the control distribution was between $25.9 \%$ and $58 \%$. The table shows two other important points: firstly, that the majority of the 1968 group scored badly on all the tests compared with the control group; and, secondly, that on each test there was a small group of the 1968 sample who scored as well as the best of the control sample.

It was decided to investigate this small group further. It was suspected that they would largely be the potential grammar school entrants, and that, if one took that proportion of the 1968 group whose ability range was equivalent to that of the grammar school control group and compared their results with the control results, then higher scores would be produced on the VLA and VLB tests. The proportion of the ability range represented in the grammar school control group was approximately the top 22 to 24 percent. (3.) It was decided to examine the performance of the top $20 \%$, and the top $25 \%$, of the 1968 E sample. It was found that the top $20 \%$ had done worse than the grammar school group on one test, that they had done better than the grammar school
group on another, and on the other four tests there was no difference. The larger, top $25 \%$ group had done only slightly viorse then this. One can claim, then, that the "grammar school potential" children in the primary school experimental group have performed more or less as well as their equals in the grammar schools, who were two years older than them. On the other hand, it must not be forgotten that the experimental group had been taught with the course for which the tests were designed, whereas the teaching received by the grammar school control group may not have been so relevant to the tests. Nevertheless, the success of the "grammar school potential" children in the experimental group seems worth noting. (For results, see Appendix E, page 305.) One final comparison of the VLA and VLB results was made between the control and the 1968 groups. It will be recalled from Chapter 6, page 82, that each test included some words taken from the Viens Lire course, ("known items"), and some "unknown" items, not included in the course. It was felt that the course would have at least achieved something for the whole ability range if the scores on the "known test items" were as good as the control group score for the same items. Appendix I gives the figures for this comparison. From the correlation figures given, it will be seen that pupils scoring highly on the known items tended to score highly on the unknown items as well. For VLA and VLB tests combined, $r=0.88$. It will also be seen that for every test the pupils scored better on the known items than on the unknown, and that the figures were significant for every test except VLBl. Finally, it will be seen that the control group scored better than the 1968 group on every test and, except for the VLAl result, the differences were significant for every test.

From this comparison of "known" and "unknown" test items three conclusons may be drewn. Since the 1968 sample has obviously scored better on the "known" items than on the "unknown" items, we may assume either that these items are inherently more easy than the unknown ones, or, that the teaching course has effectively taught these items as complete words. At the same time, the scores on the unknown items, although lower, are never zero, and this points to the fact that the emphasis on a grapheme - recognition teaching approach has not been wasted. This is especially clear if one thinks about the tests VLA2 and VLB2. Here the children had to hear a word, analyse it into its sounds (consciously or unconsciously) and fill in the missing letters on the printed page. That they were even able to do so for words they had not heard before, is apparent, though the success rate was only $24 \%$ for VLA2 and 31\% for VLB2.

The third conclusion to be drawn follows from a comparison of the scores on the "known" items with the control group scores on these items. From this it appears that the degree of success of the 1968 group on words they have been specifically taught is not as high as that of the control group. This can partly be explained by the fact that many of these "known" words are very common - "Bonjour", "mais", "c'est", etc. - and, with the larger experience of written French, the control schools will doubtless score better on these. Even so, it is clear that many pupils in the 1968 sample have not completely absorbed all those words which appeared in the texts of the Viens Lire course. Overall, then an analysis of the results of tests VLA and VLB shows that the 1968 experimental group as a whole was not able to achieve the same results as the control sample or the two experimental classes of 1967.

It was suggested that the reason for this lay in certain advantages possessed by the 1967 classes and by the control classes, and in one particular disadvantage on the part of the 1968 group. Before going on to examine certain sub-groups within the main sample, the results of two classes which completed the whole course and therefore took test VLC will be examined. These were classes C and Dl.

A glance at their results in Appendix E, page 299, will show that they confirm the results of VLA and VLB. The class D] had generally done better on all three sections of VLC than the control group and the two 1967 experimental classes. However, this is a streamed class and these results only confirm what was found when examining the "grammar school potential" children on tests VLA and VLB. Class $C$, which in all respects is more typical of the sample as a whole (see both the I.Q. and $V L$ results for this class in Appendices $D, E$, pages $891{ }^{200 .}$ ) has scores consistently and significantly lower than the control group and the 1967 experimental group. These results, therefore, only confirm that the 1968 group as a whole (as represented by class C) was not able to achieve the same high results as the two 1967 classes, but that the "grammar school potential" children in the 1968 sample (class D1) did achieve very convincing scores. Taking individual groups within the 1968 sample, the most obvious starting point is with individual classes. Looking at the scores achieved by each individual class in turn, it is possible to see reflected some of the conditions relevant to that class. These were described fully in Chapter 10 and will be recalled here where necessary.
(p.300)

It can be seen from the table/that class DI scored highest on every individual test, bar one, and therefore also scored highest on the aggregate for VLA and VLB together. This is not surprising in view of the many advantages possessed by this A stream class. The next best scoring class, judged by the VLA/VLB aggregate was class B, also earlier described as an advantaged class. More surprising, possibly, is the fact that class D2 came third on the aggregate for the two tests combined. This class was a B stream in a three-and-a-half stream school, had to work in cramped conditions for audio-visual work, and had a teacher who, at the time of the experiment, was not at all happy at teaching French. The children's French background was also not ideal. On the EPC2 English test the class came third out of the eight, which suggests that their linguistic ability may have played a part in their success. (On the non-verbal reasoning test, which correlated less well with French results, this class was second out of the eight, and on the primary verbal reasoning test, which correlated moderately with the French, they were fifth out of the eight.) Apart from her French teaching ability, the teacher was very competent and hed a good rapport with the children. Except for these two factors then - linguistic ability and a sympathetic teacher there is little else in the evidence available to explain this class's comparative success. The classes from school E, and school $C$, fall together in a bunch on the aggregate score for VLA and VLB. These two schools drew on the same geographical area, school C being for Roman Catholic children. The similar results are therefore not too surprising. The lower result for class E2, compared with the other
two E classes ( 65.27 as against 70.60 and 71.88 ) is the sort of difference that might be expected to ocour in one case out of three ; it is interesting to note, however, that whereas classes El and E3 were taught French by their own class teacher, class E2 was taken for French by the class teacher of E 3 . It seems therefore, that this factor of whether a class is taught by its own class teacher or not, may just possibly be an important one, but the evidence is not strong. Looking at the one remaining class, it is clear that class A had the lowest scores of all on each individual test as well as on the VLA and VLB tests together. This class had many disadvantages, in particular its change of teachers and its double age range. Because of this last factor, it is wrong to treat the figures for the class as a whole and the results for the two sections of the class are set out separately within the table. The younger group had a very inadequate background of French before starting the Viens Lire course; on the other hand, they were more intelligent than the older group. It will be remembered that a significant difference at the 0.05 level was found on all three I.Q. tests between these two groups, with the younger group having the higher mean each time. The VLA and VLB results also show the younger group achieving higher means on nearly all the tests, but here the differences are not significant at any acceptable level. In spite of their very short exposure to French, the younger group have done as well as the older group on the Viens Lire tests. It appears that one could equally well say that the older group has done as well as the younger group in spite of its lower average intelligence.

All these results point to the fairly obvious fact that a variety of different factors can affect the achievement of children on these French reading tests. These certainly include general intelligence, the amount of oral French already covered, and the relationship of the teacher to the class. Whether the teacher is the class teacher or not may also play a part. Two other comparisons were also made within the group to see what other factors might influence success or failure.

The first division made along non-class lines was between boys and girls. It will be recalled that there was no significant difference between the scores of the two sexes on the three intelligence tests if the all-girl class B was excluded. The figures for the VLA and VLB tests for the two sexes will be found in Appendix E, page 306. It will be noticed that the girls have scored higher averages than the boys on four of the six tests. However, only one of these differences, that on test VLA2, is significant ( $p=0.05$ ). There is, then, a slight, but definite, tendency for the girls to score more highly on the French tests than the boys. The second comparison - taking groups other than classes - was made to obtain a better idea of the effect of streaming on the course. It will be remenbered that class $D 1$, the $A$ stream at school $D$, completed the course in half the time taken by the only other school to complete the course. The other schools must contain many pupils, of the same ability as those in class D1, who were taking the course at a slower pace because of the needs of their fellow pupils of lower ability. It was decided to compare the achievement of some of these "A stream"
type pupils at other schools with the "A stream" class at school D. For this purpose a special group of "A stream" pupils was selected from the classes at school E, and their results compared with the $D$ school A stream. The intelligence test scores of each pupil in class Dl were examined and, as far as possible, each pupil was matched with a pupil from school $E$ with a similar pattern of scores and of the same sex. Because of absences and the difficulty in finding suitable matches, only 33 pupils from class $D$ were finally matched with 33 from school E - 16 girls and 17 boys in each. The averages for these two groups on the intelligence tests and on the VLA tests are shown in Appendix J, page 331. It is immediately obvious that the two groups are well matched on the three intelligence tests both on average ability and on spread of ability. There is no significant difference between any of the scores on a "I" test. However, on the three parts of test VLA, the A stream of school D had achieved higher averages than the "A stream" ability children of school E, and one of these differences is significant at the 0.001 level. There are too many other variables in the situation - different teachers, school environments, teaching methods, etc. - to draw any hard and fast conclusions from these results. The most one can say is that in this case, children of A stream potential in a streamed class achieved better results than equally gifted children in unstreamed classes, and took less time in doing so.

These then were the main statistical findings from the results of the main 1968 experimental sample. In the main comparison with the two 1967 groups, the 1968 group does not come out well, and it would
appear that we cannot expect a primary class working in normal conditions to achieve the same high results as were achieved by the two original experimental classes of 1967. This apparent lack of success was qualified by the results achieved by primary pupils of grammar school potential within the 1968 sample. Naturally the aim of the experiment was not merely to test the success of the course as a teaching method; it was hoped from the start that the experiment should supply more information about specific problems involved in the teaching of French reading. However, before analysing the results of the tests by more linguistic methods, we will first examine the results achieved by a follow-up group of five classes in the autumn term of 1968.

## Notes to Chapter 13.

(1) Burstall, C. French from Eight. Page 26.
(2) Kellermann, M. Two Experiments on Language Teaching in Primary Schools in Leeds. Page 16.
(3) Figures provided by Durham County Council.

## Chapter 14. The Second Experimental Sample in 1968

At the beginning of the autumn term 1968, the five schools who had been involved in the main experiment in the spring and summer terms were approached to see whether they intended to use the Viens Lire course with their new fourth year classes. School A replied that they would be doing so, but that the class would contain the younger members of the previous year's class, and so it was decided that this class should not be used in a continuation of the experiment. School C replied that they were unlikely to be using the course that term, and as the experiment had to end in December, this class too was excluded. School E replied that one class (the equivalent of E2) would be taught by a new teacher for French who had not taken part in the previous part of the experiment, and this class was also left out of the batch. The schools who were able and willing to provide classes were school B (one class of girls), school D (one A stream and one B stream class) and school E (two unstreamed classes). These classes are referred to by the same codes as their equivalent classes in the two previous terms, but with the prefix "2", to indicate that they belong to the second batch, thus: $2 \mathrm{~B}, 2 \mathrm{Dl}, 2 \mathrm{D} 2,2 \mathrm{El}$ and 2 E 3 . This second batch is referred to in the appendices (especially D and E, page 294 to 304) as 1968 E 2 , the second 1968 experimental group, to distinguish it from the first (main) 1968 group, referred to as 1968 E. In most ways the teaching situation for classes $2 \mathrm{~B}, 2 \mathrm{D}, \mathrm{2D}$ etc., were the same as for classes $B, D 1, D 2$ etc: In each case the teacher
and the classroom were the same; the timetable was much the same, with slight modifications; the general school background had naturally remained the same. As far as French background was concerned, teachers E1 and E2 reported that their two classes had followed much the same procedure as their predecessors. Teacher D2 felt that class 2D2 had had better French oral instruction than class D2, though the course used had been the same. Teacher DI reported that class 2DI had started French at the beginning of the third primary year, and not, as had class D 1 , in the last term of the second year. They thus had one term's less experience, but had certainly covered as much oral French work as was necessary. Teacher $B$ felt that class $2 B$ were probably less able in oral French than class $B$ had been, but she called them "a more stable" class, and felt that they would do better on the written work. The main difference between the two groups was naturally that they were made up of different children. The measurable factors of age, intelligence etc., for the second experimental group are set out in appendix $D$ (page 294). $A_{s}$ it stood, this group was obviously not comparable with the 1968 main group of eight classes. The main difference, of course, was the absence in the second group of classes from schools $A$ and $C$. It was desirable that the two groups should be as similar as possible, in order to make valid comparisons of scores later on, and therefore, a sub-group of pupils was selected from the main 1968 group of eight classes that was more like the second group. This sub-group differed from the main group in two ways. Firstly, it did not include pupils from schools A and C, but only from schools B, D and E, as did the second 1968 group. Secondly, it included all
those pupils from these three schools who had been present for the three attainment tests and testing unit VLA, regardless of whether they were present for testing unit VLB or not. The second batch did not reach unit VIB, so it was possible to enlarge the sub-group of the 1968 main group in this way without falsifying the comparison. For this reason the averages for individual classes - $B, D 1, D 2, E 1$, E2, E3, - may differ slightly between the main group (1968E) and the sub-group (called 1968血(1)). I'he figures for 1968E(1) will be found in appendix $D$ (page 292).

As far as the make-up of the two groups is concerned, it will be noticed that the second batch, 1968 E 2 , contains proportionally more girls (91 out of 157 or $58 \%$ ) than the selected sub-group, 1968E(1), ( 91 out of 181 or $50 \%$ ). This may be important as it was found that there is a slight tendency for girls to perform better on the Viens. Lire tests than boys (see Chapter 13, page 166).

As far as intelligence is concerned, it was hoped that the two groups would prove to be much of the same level of ability, especially on the English test (EPC2) and the verbal reasoning test (PV3) which correlated best with the French results (see appendix $F$ ). If this proved to be the case, then any difference in the French results of the two groups would have to be ascribed to some other factor - which might throw more light on the teaching of French reading. For this reason, it was necessary to be very cautious on testing the hypothesis that there was no difference between the two groups on measured ability, and therefore a level of significance of $p \neq 0.2$ was selected. Even at this level, no significant difference was found for any of the three attainment tests, and it was possible to retain the hypothesis
of no difference. For individual classes a "T" test was applied to the differences between the means of tests FPC2 and PV3 for corresponding pairs of classes, i.e. $B$ and $2 B, D 1$ and $2 D 1$ etc. Significant differences at the 0.2 level were found in only three cases out of the ten: on test PV3 for classes $B$ and $2 B$; and on tests EPC2 and PV3 for classes D2 and 2D2. In two of these cases, the class from the second batch had the higher mean, but class D2 had a higher mean than 2D2 on test EPC2. In general, then, it is safe to say that no significant difference exists between the intelligence of the two groups.

Apart from the factor of sex, there was one other way in which the 1968E2 group differed from the 1968 main experimental group, and this was in the age at which they started on the course. Most teachers did not in fact plunge straight into the Viens Lire course at the beginning of the Christmas term, but consolidated the oral work of their class first. Even so, the second batch of classes started the Viens Lire course some two-to-three months earlier, comparatively, than their predecessors in the main 1968 group had done. This meant that they probably did not have as full an oral French background as their predecessors had had; on the other hand, they had also had less time to start working out their own phonetic spellings of French words, and thus the element of interference from English was possibly cut down. The two major differences between the pupil. samples were, then, the slightly higher proportion of girls in the second batch (1968E2); and the slightly longer oral French background of the 1968 main group. As well as these pupil differences, there was one fairly obvious difference in the teaching staff, and that was their previous experience with the course. This could, of course, affect the staff in different
ways. Increased experience might mean better teaching, or it might lead to over-confidence and a less careful approach. It certainly meant that the teachers felt confident enough to develop the course in their own way. Teacher B, for example, decided to introduce some controlled writing earlier on in the teaching programme than she had done in the previous year. Teachers El and E2, reflecting the more modern experience-and-play methods used at school E, developed a series of "bingo" cards for French reading, which they used with their brighter children while the others were still learning. Each child had a card with six French sentences. One child started reading a list of French sentences, and the first child to have all his six sentences read out was the winner.

It is clear, therefore, that the two groups differ from each other in three main ways. Firstly, the second sample of pupils contains more girls, a factor which, if anything, is likely to improve its chances of scoring well on the French tests. Secondly, the second sample of pupils have had a marginally shorter experience of oral French - three-and-a-half terms as against four terms. And thirdly, the teachers were more conversant with the course on the second run. The effect of these last two differences is less clear to foresee. Every class in this second batch reached the fourth teaching unit before the end of term, and therefore it was possible to administer testing unit VLA to all the sample. This was, in fact the only testing unit administered, as no class reached teaching unit 7 before the end of term. This was in part due to the late start of some classes. The testing unit VLA was administered by the author of this thesis under
much the same conditions as for the main 1968 sample (see Chapter 11). The results for the whole group and for each individual class will be found in Appendix E (page 302); as will those for the small comparison sub-group (1968E(1)), page 301.

Taking the results of the whole group to begin with, it will be seen that the second group 1968E2, has scored higher on tests VLA2 and VLA3, but lower on test VLAI. The difference between the means of the two groups for tests VLAl and VLA3 is slight and was found not to be significant at the 0.05 level. In the case of the test VLA2, the average achieved by the 1968 sub-group, 1968E(1), is noticeably lower than that achieved by the second batch, 1968E2, and the difference is indeed significant at the 0.05 level. On the whole, this second test, VLA2, was the most difficult of the three, calling as it did for adtive recall and reproduction of graphemes. Overall, it is probably fair to say that the second batch of classes, 1968E2, had a slight tendency to score better on the French tests than the 1968 sub-group, 1968E(1).

When looking for reasons for this success of the second 1968 group, especially on test VLA2, the first thing that strikes one is that certain classes contributed more than others to the general success of the group as a whole. In particular, class $2 B$ has done considerably better than class $B$ on this test (average $=27.53$ as against 19.05). Class $2 B$ is in fact the third class from school $B$ to have been taught by this course; in the year before class B, class 1 of the pilot study had also come from this school. A comparison of class $B$ and classi in Chapter 13 showed that the latter's results were always better than the
former's; a comparison of the results of class $2 B$ and class 1 shows the latter still ahead, but by no means as far as before. In fact none of the differences are significant at the 0.05 level. (The results will be found in appendix E, page 304). It will be recalled that class $2 B$ scored slightly better than class $B$ on test NV3, although the difference between their scores on EPC2 was small and not significant. It would perhaps not be wise to ascribe the whole difference in scores to greater intelligence alone. There was also the increased experience of the teacher; but in the other five classes, this increased experience has not produced a similarly great increase. The only other factor noted for class. $2 B$ that was not present for class B, was the earlier introduction of some controlled written work, and it is just possible that this may have had some effect, especially in view of the nature of test VLA2, which does call. for the writing in of graphemes.
'The other classes that had obviously improved on their predecessors' scores were the classes at school E. Once again, this applies mainly to test VLA2. (On VLAl class $2 E 3$ did significantly worse than its predecessor). In this case, the improvement over the previous year is not as drastic as in the case of class $2 B$, and none of the differences between classes El and 2El, E3 and 2 F 3 on test VLA2 are significant at the 0.05 level. At the other end of the scale, classes 2 Dl and 2D2 have done slightly or considerably worse than classes D1 and D2, and this suggests that the greater experience of the teaching staff by itself has not played a major role in improving the scoring rate of the second batch.

The other factor that may have played a role in determining the success of the 1968 E 2 second batch is the large proportion of girls in the sample. It had been found with the main group in 1968 that the re was a tendency for the girls to score higher on the Viens Lire testing units than the boys, and if this took place in the second batch as well, then, given the greater proportion of girls in this second batch, the average score would be pushed up slightly. A glance at the measured intelligence of the two sexes (Appendix D, page 295) and their achievement on the VLA tests (Appendix E, page 302), will show that this has not played a great role. There is no significant difference between the attainment test results of the $1968 \mathrm{E}(1)$ girls and the 1968 E2 girls, or between the two groups of boys; the 1968 E 2 boys have not done significantly better than the 1968 E boys on test Vha2. The girls of the second batch have scored a significantly higher score on test VLA2 than the girls of the main group. It can be said that the presence of the girls has made the difference, but not in the sense meant above. The 1968 E 2 group's score on VLA2 is not higher because there are more:girls achieving the same level of success as their 1968 E counterparts, but because the 1968 E 2 girls have scored better than the 1968 E girls.

Having excluded greater teacher experience, higher measured pupil intelligence, and the number of girls in the sample as possible explanations for the greater success of the 1968 F 2 group on test VLA2, and with the question of length of oral experience a very uncertain factor, one is thrown back on the success of three individual classes as the only certain relevant fact. The improvement in the scores of classes 2 El and 2 E 3 over El and E3 is not great and this leaves class $2 B^{\prime}$ 's success as the most important factor in the greater
success of the group as a whole. As stated above, the only explanation presented by the evidence available is that the class had done more written work early on in the teaching of the course than its predecessor, class B, had done. By itself, this is not enough evidence to base a firm recommendation on, but it could be useful in backing up other evidence if such could be found. It was at this point that the programme of testing came to an end, but it had been agreed that the five schools who had allowed themselves to be used for the experiment should be able to make use of the teaching materials of the ViensLire course for the rest of the year. In July, 1969 the author of this thesis made one final visit to the schools in order to see how they had progressed during the year.

The school that showed the most obvious signs of having developed the course to meet its own needs was school E. The use of French reading "bingo" cards to keep the brighter members of these unstreamed classes busy while the rest of the class continues with the main course was mentioned earlier in the chapter. By the summer the two teachers at this school had developed several other useful aids. These included: duplicated readers, containing either the Viens Lire texts or the same material but in different story form; and work oards, very similar to the second type of test in the testing units. The procedure with the work cards was that one child would read out the full sentences, and the other children would fill in the missing graphemes which were already written on small pieces of card to prevent spelling errors. A certain amount of controlled writing had also taken place. The
first exercise in their French books was a drawing of a house, with the parts labelled (copied from the blackboard) and underneath, sentences for completion, also copied, such as: "La maison a six....", where the answer "fenêtres" was hoped for.

Teacher B had also recognised the need for extra activities, and had introduced written work earlier, as mentioned above. Class 2B had completed the course in two terms, and had gone on to read Le Rideau se leve in the summer term. None of the schools, except school C, was happy about the idea of having the teaching materials removed from them. The extent to which school E was committed to the course and to the general idea of introducing French reading in the fourth year of the primary school is clear from the description given above, but the same was true of the three other schools, $A, B$ and $D$, who wanted to be able to retain the course. At school $A$, the headmaster felt that reading was now an essential part of the French course in the final year. Teacher D2, who had in the meantime become head of the French department, welcomed the well structured nature of the course. Reservations remained about the black-and-white film strip B, but outside the experimental conditions all four shools felt that Viens Lire would be a useful course for their fourth year classes.

## Chapter 15.

## Linguistic Problems

As well as supplying much statistical data concerning the effectiveness of the Viens Lire course and its suitability for use in the final primary school year, the tests administered to the children supplied information about how the pupils were coping with the French language and what specific problems they were finding with it. What follows here is an analysis, by linguistic methods, of the test results of the 1968 main ( 8 - class) experimental group.

Two problems which are possibly more closely related to the format of the tests than to specific linguistic defects will be examined first. Both relate to the second type of test, in which gaps in sentences had to be filled in, in response to hearing the sentence read aloud. The first problem that the children faced was deciding how much to fill in, and some 250 cases were discovered in tests VLA2 and VLB2 where children had written a letter that was already there, either as well as, or instead of, their attempt at the missing grapheme. Thus, in the final sentence of VLA2: "Les d-ze voyag-rs sont au b-t de I' ascens-r," the blank in "douze" was filled by US (four times), OZ, (twice), UES and SE; the children were trying to represent the sound already represented by the /z/. In "Voyageurs", the blank was filled by AG (three times), CH (twice), EG, GE, and AGE, all representing attempts to give the sound already represented by the $/ \mathrm{g} /$. There are probably two reasons for this phenomenon. The first relates to examples such as AG, AGE, in the last case, where the child,
baffled by the demands of the test, has apparently merely copied out part of the existing word. This is obviously a problem for the test designer, but not so much a linguistic one. The second reason is more linguistic by nature and relates to examples such as US, OS (from "douze") and CH (from "voyageurs"). Here no letters have been taken from the outline of the word as it stands on the paper, so the children must be making genuine attempts to represent the sound they believe to be missing, whilst not recognising that this particular sound is not the missing sound but its immediate, and already printed neighbour. The children are therefore not totally relating the sound pattern to the written pattern.

The second problem is a more aggravated example of this. In this case the failure to relate the speech and written patterns was so great that sounds from totally different words, often from the other end of the sentence were written in the gaps. This was a less common problem - only 60 examples in 22,000 responses, - and it is therefore not so serious. Among examples of this phenomenon are some very curious ones, and once again the explanation seems either to be straight copying from another word or a genuine attempt to represent a sound from the wrong part of the sentence. An example of the first is an answer to question one of VLB2, ("- upe blanche"), where one child filled in Blupe for Jupe. An example of the second type is question three of VLA2, "Il fit b-= et les fl-rs sont r-ges", where one child filled in beau with an attempt at representing et les - "beli". Another minority problem, but an interesting one, was the phenomenon of writing short words, such as le, la, les etc. instead of a sound. Only 120 examples of this were found and the majority of them came
from question five of VLB2: "Le fact-r c-rt - cin-ma". The problem here was the third word (correctly au). Many children obviously did not hear this short word at all, but tried to fill in the gap sensibly. The most common short word before a noun is an article, so it is not surprising that LE was offered 28 times, LA 13 times, UN 5 times and URE once. (The preference for the correct masculine gender (le cinema) is interesting.) Other offers were ET and EST, both three times, and LES once. Another example of this, though not so unambiguous, is the case of "Jules" in question 7. of VLB2. What the children saw as "-les tr-ve....."; what 48 of them wrote was "jeles trouve". Now it is difficult to decide whether the JE represents an attempt to write what they heard, or a re-interpretation based on the writing into "Je les trouve". Certainly some pupils did re-interpret: thus J'ai occurred here four times, and J'a and J'e once each. This writing in of short words took place, but less logically, on three other questions in VLB2 where the initial letter of a word was missing, e.g. question 6.: "Elle a un ced- -norme", where énorme was replaced by ETnorme, UNnorme, LAnorme, LEnorme and even ILnorme. This phenomenon, especially on question $5 . ;$ does suggest that some of the children were trying to fit what they had written into sensible French gramatical structures and were using more than one of their linguistic skills in trying to solve the problems set by the test. In several cases it was obvious that the children were, if anything, relying too heavily on the written clues in test VLA2 and VLB2 and were not listening carefully enough to the tape. Once again this is a minority problem, with only 42 examples identified. In these cases
the children tried to interpret the written letters in front of them into a different French word from the one intended, and indeed spoken. Five words were affected in this way. The first was "balai" in VLA2, question 6. To the "bal-" given in the question, "lon" was added on two occasions, giving "ballon". In question 7., "Je $\nabla \boldsymbol{\sim}$ ", was completed vrai(s) on three occasions ("vrai" had occurred in question 4.) In question 8. "sou-e" (souche) was made into "souris(e)" on two occasions, and here the clash with the spoken form is extreme. In VLB2, the third word in question 1., "la -upe" (la jupe) was interpreted as "pupée" 20 times, either by putting "p" (18 times) or "po" or "pi" (once each). Finally the word "oiseaux" in question 4., which appeared as "-s-x" with both /oi/ and /eaw/ to fill in, was interpreted completely or partly as "poisson" on nine occasions. In the first syllable POI appeared five times, PO twice, and PWA and POU once each. In the second syllable ON appeared three times, and OIN and SOM also oocurred, as, curiously, did PS. Finally, there were those who, whilst hearing "oiseaux" could not get irid of the common fallacy that the correct form is always "l'oiseau", or even "loiseau". Hence LOI occurred four times, LO three times, LEU and L' once. This tendency among some pupils to rely more heavily on the written than on the spoken clue is interesting in itself, but even more interesting is the fact that no less than a quarter of the examples come from one class, D2. This class's preference for and reliance on written rather than spoken French was commented on in Chapter 12, and it is possible that this phenomenon is a reflection of this, which itself was related to their lack of oral confidence. If this is so
then it is further evidence of the need to establish a firm basis of spoken French before the children progress to the written word. What has just been described may be looked on as one French spelling interfering with another. Whole-word interference from English took place also but this too was a limited happening, with only 191 occurrences noted in 22,000 responses. The most common of these was in question 5. of VLA2: "M-s oui, voici un bat- et une p-pé bl-e". Here the ending -e on "bleue", to agree with "poupee", misled many pupils into putting simply $U$, this giving the English spelling "Blue". No less than 146 out of 286 gave this answer, and it was the most frequent response, with EU a poor second (59 responses.) In other questions involving /eu/, U was never higher than fourth choice - and its next highest frequency was 27 appearances in answer to question 10. "... ascenseur". It seems that its great frequency in question 5. must be due to the English spelling suggested by the letters already given. Another 34 examples of this interference were the very understandable interpretation of "balai" (VLAA2, question 6.), into "ballet", by adding LET ( 25 times) or ET (nine times). This example was also noted by Wynn (1.) In question 10., "b-t", (bout) was filled in three times as "boat", but OA was used elsewhere to represent /ou/ and this may not be interference. The other example was in question 6. of VLB2, where "g-e" (gaie) was filled in as "gate" on seven occasions by adding AT, and once by adding ATE.

So much for the rendering of complete words. Nuch more information was provided, however, about the rendering and interpretation of the
individual graphemes. The main source of information for this was once again tests of the second type (VLA2 and VLB2), but some evidence was also drawn from the first type of test (VLAI and VLBI). In this type, the chilidren had to listen to three words being read and markp, 2 and 3 in the correct order against the four words printed. Certain patterns of mistakes in this type of test could be used as evidence of misinterpretation of the written grapheme. For example, if a child heard "seau, sais, sous", on the tape of question 1. of VLAI, and then wrote:-

$$
\begin{array}{r}
\text { si }() \\
\text { sais }(2) \\
\text { sous }(1) \\
\text { seau (3) }
\end{array}
$$

then it is possible to say that he interpreted/sous/ as the best spelling for "seau" [so] . One cannot be so dogmatic about the 3 placed opposite /seau/. Having filled in:-

$$
\begin{array}{r}
\text { si }() \\
\text { sais }(2) \\
\text { sous }(1) \\
\text { seau ( ) }
\end{array}
$$

he now hears "sous" [Su] . No doubt there is a reluctance to alter the figures already entered (although this did happen occasionally); he is therefore choosing between/si/ and /seau/ and no doubt the second will look the better fit. The evidence obtained from the four tests VLAl, VLA2, VLBI and VLB2, as it concerned individual graphemes, is set out in Appendix K. (page 332) and Appendix L. (page 336).

The first thing that appears on examining the figures given in Appendix K . is the definite existence of interference from English spelling conventions. Of the 22,000 responses recorded to tests VLA2 and VLB2 (requiring filling in gaps), 8,000 were correct answers and up to 3,000 others showed evidence of interference. Some of these may have been due to other causes but even allowing for these, it seems likely that not less than $10 \%$ of responses were subject to interference from English spelling conventions. Taking consonants first, the most obvious cases of interference are with /ch/ where SH was used 126 times on the two tests, and $/ \mathrm{c} /$ or $/ \S /$, where $S$ was used 107 times. In this case of $/ \mathrm{c} /$ and $/ \mathcal{C} /$, this is 26 times per question; for $/ \mathrm{ch} /$ it is only 12 times per question. Among vowels the most heavily contaminated by interference would appear to be /é/, with 154 examples per question on average. However, there is a difficulty here; 729 of the 922 examples are represented by $E$. This may have been caused by the similarity of the English (as in télephone, cinéma etc.) or simply by forgetting to put on the accent, or for several other reasons. Certainly there is evidence of lack of care about accents and cedillas, as will be mentioned later. The case for /é/ being heavily contaminated by English interference is not a strong one therefore.

After /é/ the next most heavily affected grapheme is/eu/. Once again the letter E is the main substitution, and, in view of its appearance before an $/ \mathrm{r} /$ (as in "professeur, pleurer, ascenseur" etc.) it seems likely that this is genuinely a case of interference from the English "-er" ending. On the other hand, such spellings as Er and UR are
frequently found to replace /eu/ by itself, and once again the possibility of contamination from English seems a strong one, since these endings, as in English "fur", do represent a sound (extended schwa) close to the $[\infty e]$ as in the French "feu". Even more common than these, however, as a replacement for /eu/, is $U$; the reason is probably that the French sound, as in "peu" [ $\rho$ oe] sounds very close to the Northern English pronunciation of the English grapheme/u/ as in "put" [pot]. All these vowel sounds $([\infty],[\phi],[\exists]$ and $[\infty]$ ) are made with the tongue in a fairly central position in the mouth. Evidence of this confusion of the three sounds $[\infty]$ (French) and $[\theta]$ and $[\infty]$ (English), is found in tests VLAl and VLBl. Here the pupils heard a series of words and had to mark on the answer sheet the written form they thought they had heard. Out of some 280 pupils it was found that:-

| 78 |  | n maxked nu . (Vabl, |
| :---: | :---: | :---: |
| 28 who heard |  | "de" marked "du". (VLB3, q. 98 |
| 21 who heard |  | ed "fut" | Here too, then, is strong evidence for the grapheme/u/being interpreted in the Northern English manner as a close approximation to the French sound [ $[\infty]$.

The next highest frequency is with the grapheme/ai/which has two pronunciations, $[e]$ or $[\varepsilon]$. This is reflected in the English spellings used. Where the [e] pronunciation was used (as in "vrai", "gaie") the letter A tended to be used, since this represents the English diphthong [El] which passes through the [e] position in its glide. Thus the pattern of response to "vrai" was:-

AI - 180
A - 21
IA - 19
E - 13
On the other hand, where the $[\varepsilon]$ pronunciation was used, the letter E predominated, as in "mais", "fait", "j'ai". Thus, in "j'ai"

$$
A I-150
$$

$$
E-43
$$

$$
A-21
$$

The grapheme /ou/ also ahowed major interference, with an average of 49 responses per item affected. In this case $U$ (the long Northern English sound) was the main representation of the sound, with 00 also appearing. It is, of course, possible that $U$ is used here because of the French grapheme /u/ $[y]$, which is difficult for English speakers to distinguish from/ou/ [u] . This is discussed below. Other vowels were also affected, to a lesser extent; thus with /eau/ the main variant mas 0 , but this could also have been the French grapheme, 0 also appeared for /au/. /oi/ was not affected too greatly by the English WA or variants thereof; only nine cases per item were noted on average.

Interference was a fairly widespread problem. It was widespread throughout the individual classes as well, and, on the whole, its frequency in the scripts of any one class correlated roughly with the total number of mistakes made for any reason. In attempting a correct rendering on pap er of the sounds and words heard on the tape for tests VLA2 and VLB2, the pupils were not
affected by interference from English alone. Identification of the sound being made also provided a problem, as was indicated by some of the responses. This proved an especial problem with vowels as will be indicated shortly. With consonants the problem was not so great, but where it did exist, it was always very apparent (Appendix L). The three consonants involved were C (including §), $J$, and CH . $J$ and CH are voiced and unvoiced versions of the same fricative, so the appearance of one for the other ( J 61 times for CH , CH 22 times for J) is not surprising. Nor is it surprising to find a G for $J$ ( 35 times) since in both French and English soft $G$ has the same sound as J. The use of $G$ for CH ( 32 times) is less understandable and may be due to interference.

Possibly the most surprising substitutions for CH are C ( 238 times), S (239 times) and $\mathcal{G}$ ( 4 times). The presence of $S$ in this set suggests that several of the C's may well also be attempts to represent the sound [s], which the children obviously thought they had heard, rather than a partial writing of CH . More light is thrown on the problem of CH by question 8. of VLA2: "La -ouette -uinte sur la; sou-e". (La chouette chuinte sur la souche). Although the missing grapheme was /ch/ each time, the three items produced three different patterns of response, thus:-

$$
\begin{aligned}
& \text { Chouette - CH } 138 \text {, SH 49, S } 27 . \\
& \text { chuinte - S } 79, \text { CH } 71, \text { C } 24 \text {, SH } 12 . \\
& \text { souche - CH } 96, \text { S } 40, \text { SH } 15 .
\end{aligned}
$$

In "chouette" and "souche", over half of those answering recognised the sound $[\delta]$ which they represented either in the French manner
/ch/ or in the English manner /sh/. In the case of "chuinte", however, the semi-vowel $[y]$ represented by /u/ pulls the tongue forward for the preceding/ch/ and almost brings it to the pesition for the sound [s] . This contrast obviously prevented the majority of those answering from recognising the true phonemic value [f] of the sound.

With vowels, failure to recognise the sound precisely was more often indicated (in tests VLA2 and VLB2) by the gap being left blank or by something meaningless being inserted. However, three examples were noticed where a valid French grapheme was used to represent an approximately similar sound (Appendix I page 344). In all three cases the possibility of English interference is not ruled out. The first case involved the use on 30 occasions of $I$ for the grapheme /u/. The only difference between $/ i /[i]$ and $/ w /[y]$ is in the rounding of the lips for the latter sound, and it is possible that many of the se occurences of $I$ are caused by the children being unable to distinguish the two sounds. The second case also concerned the use of $I$, this time to represent the grapheme /é/ . In this case the similarity between the sounds represented by /é/ and/i/is greater if one takes the English value of the latter [6] for which the tongue is almost as low as it is for $[e]$, the sound represented by/é/. This may, therefore, be an example of interference. The third case of interference has already been mentioned in that section and involves the interchangeability of $/ u /$ (representing $[y]$ in French but $[u]$ in English) and /ou/ (representing $[u]$ in French). The sounds $[y]$ and $[u]$ are difficult for English speakers to distinguish and the latter is often used for the former. Hence the use of OU
for /u/ (which occurred 28 times) may well be due to the simple inability to recognise the sound. The reverse process, $U$ being used for / ou/, was much more common ( 442 occurrences) and it seems likely that a good number of these may be due to the use of the English grapheme $/ u /$ for the phoneme $[u]$ normally represented in French by /ou/.

Failure to recognise precisely the sound being made was, therefore, one cause of failure, but failure could also take place if the sound had been recognised properly. In particular, this took place where one sound could be represented in several different ways in French. The first example noted was the use on 105 occasions of $S$ for / / or $/ \mathrm{g} /$. This has also been mentioned under interference, since $S$ is also a valid English rendering of the sound $[s]$. Interference may also explain the use of 0 for /eau/ and/au/, (153 and 46 times respectively, although / $0 /$ is a valid French grapheme for this $[0]$ sound. The use of AU for/eau/ and of EAU for /au/, (175 times and once, respectively), cannot be explained as interference, and it seems here that genuine confusion between the various ways of rendering the sound $[0]$ may well be the cause of the mistakes. Finally, there was one example of $\hat{E}$ being used to represent/ai/. Both/ $\hat{e} /$ and/ai/ represent the sound $[E]$, and $\hat{E}$ is not valid in English. On the basis of all the evidence, it seems possible to say that some at least of these mistakes may well be due to the pupils assigning a valid, but in the context inappropriate, grapheme to the sound they have correctly recognised. It is precisely these confusions that the contrastive drills were designed to prevent, and this evidence
strengthens the case that their exclusion was a drawback for the 1968 groups.

By far the largest olassifiable group of mistakes in the two tests VLA. 2 and VLB2 are those where the child has attempted to write something in the gap provided, but has either partially or totally failed to recall the correct form of the grapheme. This proved to be a special problem with graphemes consisting of two or more vowels. Several groups can be identified within this general area. (2.) The first group of these mistakes, accounting for about one-tenth of the total, is where the child has interchanged the various letters of a grapheme, for example, writing IA instead of /ai/, EUA instead of /eau/, etc. In the majority of these cases it seems reasonable to suppose that the pupil has recognised the sound and has merely failed to recall completely the shape of the grapheme associated with it.

The second group - no less than one-third of mistakes of this general type - was caused by one letter in the grapheme being replaced by another, e.g. OU being written for /eu/, AI for /oi/, or EO for / $\mathrm{eu} /$. Within this group, the vast majority of replacements resulted in the production of a valid French grapheme, but not the correct one for the context. The first two examples are of this type. The rest of the replacements produced combinations of letters which were not recognised as French graphemes. Similarly, in the third group, replacement of one letter took place, but in this case inversion also occurred so that/ou/ was represented by UE or UA, /oi/ by IA etc. In the fourth group, all resemblance to the original grapheme is lost,
except for the presence of two vowels. Thus EA is used/ou/, UE for /oi/ etc. In none of these three groups can one see any evidence that the child has correctly identified the sound. On the contrary, it seems more likely that the pupil has merely recognised the need for a vowel combination of some kind, but is unable to decide which one. These three groups together supply some 2,000 of the 22,000 responses to tests VLA2 and VLB2, and suggest a good deal of confusion on the part of the children in respect of the five main double-vowel graphemes /ou/, /eu/, /au/, /ai/ and/oi/. The fifth and sixth groups cover most of the mistakes arising with the grapheme/eau/ and concern few other graphemes. Because this grapheme contains the three vowels "e", "a" and "u" it was found that almost any combination of these, whether meaningful or not, - EA, $A U$, $E U, U E$, etc. - was likely to occur for /eau/. On the other hand, because the plural ending "-x" was available in the teazlegraph material for the use with "-eau" (and other endings) and had obviously been taught by a number of teachers, it often appeared as an inseparable part of the grapheme/eau/, and so renderings such as EAUX, EUX, EAX, UEX, and OUX appeared. Almost half of these "false plurals" came from classes DI and B, that is from the two highest scoring classes on the French tests. Teacher E2, with her two classes E2 and E3, was responsible for another quarter of the examples. Of the eight questions on the two tests requiring/eau/ as the correct answer, one, "cadeau" in test VLB2, provided almost half the examples of this false plural, with the same classes, D1, B, E2 and E3, provi而g more than three-quarters of the examples. The obvious explanation is
that these three teachers did more work with this ending than the other teachers in the sample, and that, as a result, some of their pupils became confused. Whether the introduction of controlled writing during the course of the teaching would have taken the pupils beyond the point of confusion is a moot point. Within the context of a reading course, it certainly seems, on the basis of this one example, that one must either not go into much detail at all about curious inflexional endings, or that one must spend much more time on them than classes $\mathrm{D} 1, \mathrm{~B}, \mathrm{E} 2$ and E 3 did. The seventh group within the context of failing to recall completely the correct form of a grapheme, consists of errors arising with accents and cedillas. The largest section, with 729 examples, is made up of E for $/ 6 /$, with missing acute accent. This has already been discussed under interference, since most of the words involved were the same as (téléphone, cinéma) or similar to (énorme) English words without the accent. Nevertheless these examples do reflect carelessness with accents. Another 69 cases had E for /é/, with grave instead of acute accent, and Á also occurred 13 times. The other main problem in this section was the cedilla. C was written for / $\mathcal{C} /$ no less than 135 times, and $\mathcal{G}$ also occurred four times for $/ \mathrm{c} /$. Even more curious was the appearance of C , ' ' C or S on 13 occasions, also for f. In general then, it appeared that neither the need for accents, nor their precise function was fully recognised by many children in the sample.

It has already been hinted that a vast number of the cases mentioned above, where an incorrect response has been given, resulted in a
genuine French grapheme being used which was the wrong one for the context. This was, in fact, the case in no less than one-tenth of all the 22,000 responses to VLA2 and VLB2. (3.) The extreme frequency of /ou/ in this context is a striking feature. This confusion of graphemes is also suggested by evidence from tests VLAl and VLBI which is also set out in the same Appendix. In this case, of course, the form of the test limited the candidates' choice to actual French words. However, the scale of the interchangeability of graphemes in the pupils' minds which is suggested by the evidence as set out, is great, and leads one to the conclusion that many pupils found it difficult to distinguish between the various combinations of "a", "e", or "o" followed by "u" or "i" which make up many of the problem vowel graphemes (/au/,/eu/,/ou/, and/ai/,/oi/). Within this general picture of the various problems affecting the ability of the children to score correctly, a more precise outline emerged of the comparative ease and difficulty of individual graphemes. This could be judged by calculating for each grapheme the average percentage of pupils answering the questions on that grapheme correctly. The results of such a comparison could only be a rough guide, however, in view of various complicating factors. Firstly, there was the fact that the graphemes were not represented equally in the texts as a whole; some were pepresented by up to 22 questions, others by only three or four. In the latter case the reliability of the results obtained would not be high. $C, \mathcal{G}, J$ and $A U$ were all in this position. Secondly, the question of how many of the items for a given grapheme were known to the child from the course, and how many
were unknown would also affect the results. Thirdly, there was the possibility of the children having improved on certain graphemes during the three teaching units that took place between testing unit VLA and testing unit VLB. (Evidence that this did take place is suggested by performance on individual words that occurred in both tests. Thus, "garçon" (/̧/) was answered correctly in test VLA2 by 59 pupils, but by 103 pupils in test $\mathrm{VLB}_{2}$ ). Finally, there was the very strong possibility that some graphemes might be easier to recognise (tests VLAl and VLBI) than they were to recall and write (tests VLA2 and VLB2).

It was decided therefore to obtain two averages for each grapheme, one for passive recognition (by combining the results of tests VIAl and VLBI) and one for active reproduction in writing (test VHA2 and VLB2). By this means, the problem of increased skill between tests VLA and VLB would be eliminated. The problem of the shortage of examples of certain graphemes would remain, and would have to be taken into account when examining the results. For each grapheme two totals were produced, being the sum of all the correct answers to examples of that grapheme in tests of Type 1 and Type 2 respectively. An average number of correct answers per question was then arrived at by dividing each total by the number of questions involving that grapheme on either type of test. This was converted to a percentage for convenience. (The equation is $P=(\Sigma X \div M N) \times 100$, where $P$ is the percentage average of correct answers, $X$ is the number of children answering a given question correctly, $M$ is the number of questions containing examples of the particular grapheme and $N$ the total number
of children taking the test.)
The results of these two procedures are set out in the two tables in Appendix L (page 350). Both tables give the same information but are set out slightly differently. From the first table it can be seen very strikingly that Test Type 1 was much easier, regardless of the grapheme concerned. From the second table, it can be seen that the order of ease and difficulty varies a good deal between the two types of test. In fact, the correlation between the orders of difficulty for the two types of test is quite low at 0.45. Graphemes that are obviously comparatively easy both to reproduce and to recognise are the two consonants $/ \mathrm{j} /$ and $/ \mathrm{c} /$. At the other end of the scale, /eau/ is clearly difficult both to identify as a sound and to reproduce in writing. In view of the evidence presented above, this seems most likely to be due to its "shape", that is, to its being a combination of three vowels that occur in many other combinations. The other grapheme that is difficult on both types of test is /eu/. In this case it may be the difficulty of the sound represented that is the problem, rather than the grapheme itself. /eu/was one of the graphemes most highly represented by English spellings in the tests VLA2 and VLB2.

For all other graphemes, the order varies between the two types of test. The second diagram suggests that, to a certain extent, those graphemes that are easy to recognise are hard to reproduce, and vice versa. The next two hardest graphemes to recall and write (VLA2 and VLB2) are /é/ and /g/. In each case, it is presumably the accent or cedilla that causes the problem; evidence of this has already been
mentioned, and both are considerably easier to recognise, even on a comparative scale (table 2). The difficulty of /oi/ is less easily explained and may not be due to any one particular factor. / / / appears to be the easiest grapheme to recall and write, but it should be borne in mind that only two examples of this grapheme ("c'est", "chocolat") occurred in the tests involving the writing in of graphemes, and both should obviously be fairly well known to the pupils. Taking the tests of recognition into consideration, one of the things that stands out most clearly is the position of the four consonants at the head of the list. This indicates once again the greater difficulty of the vowels as far as both recognition and reproduction is concerned.

Quite apart from the difficulty of certain specific graphemes - and once again one must point to the longer vowel combinations as being among the major problems - it is clear from the test results as summarised in this chapter that the children had to overcome several more general problems in order to score well on these tests, and it has been shown that each of these problems proved a stumbling block. The first problem was to recognise the sound being made by the voice on the tape. The failure to do so which was reflected in many of the answers, underlines once again the fact that the children must firstly be confident in their oral knowledge of Ftench before they can undertake a reading course. The second problem, especially important in the second type of test, was to recall exactly the correct form of the grapheme. The difficulty that some children had in sorting out the vowel combinations that comprised the individual vowel graphemes,
and in remembering the need for accents, suggests that a good deal more time could be spent in visual differentiation exercises, between, say /oi/ and /ai/, /e/ and/é/ etc., the sort of exercise, in fact, that was originally included in the course but omitted in 1968. In dealing with these problems, the children used two methods. The first, probably less common, was a whole-word interpretation approach, which led to misinterpretations such as "poison ( $x$ )" for "oiseaux", where the sound had not been correctly heard, but which also played an important part, no doubt, in such common words as "c'est", "chocolat", "garģon" etc. The second method was the phonetic method, interpreting individual phonemes into individual graphemes. Once again it was the mistakes that showed up the amount of this that was going on; firstly, the amount of "interference", where a French phoneme was being related to an English grapheme; secondly, cases where the French grapheme with the correct sound value was used in the wrong context (/ $\hat{e} /$ for /ai/ etc.). This phonetic approach seemed to be the more common and, in spite of the amount of English interference, it seems that the insistence on a large amount of phonetic analysis in the teaching method of the Viens Lire course has borne some fruit.

Notes to Chapter 15.
(1) See Chapter 8 of this thesis, page 104.
(2) A full analysis of these mistakes is in Appendix L, page 345.
(3) See Appendix L, page 349.

## PART VI

Chapter 16.

## Conclusion

The work described in this thesis, and carried out between 1966 and 1968 by the research assistant and the two research students, had the general aim of discovering in detail what problems arise when one attempts to introduce French reading to Primary school children who have already achieved some oral competence in the language. The work undertaken by the research assistant showed that one cannot plunge such children straight into French reading and expect them to cope with it confidently. The next question was, obviously: what method or methods were most suited to introducing reading to such children with on the one hand their limited oral background and on the other their growing desire to see language in terms of writing? The Viens Lire course was designed as one possible answer to this question, and in designing it the research assistant took into account the major theories of language learning and learning to read. From the results of one year's work with the course, the first research student concluded that it might well be a suitable instrument for the task, and was certainly worth trying out in more normal class conditions.

The main question to be answered, then, in the 1968 try-out of the materials was whether they seemed to perform the task for which they were intended. This in turn meant deciding, firstly, whether the method of the course was conducive to success in reading; and,
secondly, to what extent success was achieved by the pupils. From the results achieved it seems clear that the course does teach reading effectively, even if the actual number of those achieving any measure of success is limited. It is also clear, however, that certain problems remain. Firstly, a good deal of confusion remained in many children's minds about the precise value of some of the French vowel graphemes. This was illustrated quite clearly in the last chapter. In fact the course was designed so that teachers could easily move from the look-and-say stage to a fairly intensive phonetic method, involving a lot of grapheme differentiation. However, it seems that this did not take place with sufficient intensity, and no doubt the omission of the grapheme exercises made it more difficult to cope with the grapheme analysis work. From the evidence available it appears that another major problem not completely eliminated was that of interference from English. Once again evidence cited in the last chapter showed that interference took place not only when the children were coping with the more difficult task of writing down graphemes but also on the somewhat easier tests where they had to match a printed word with a spoken sound. Interference is a major problem and much of it may originate from the time before the teaching of French reading actually begins, a time when children may already be "seeing" French words in their minds but spelt according to their own English spelling conventions. This problem the course attempted to overcome in the film sequences by presenting spoken and written material simultaneously, thus trying to create in the pupils' minds a very close link between the two. The
course was clearly not completely successful in doing so in the conditions of the 1968 experiment.

Finally on the debit side there was the accusation from several teachers that the black-and-white slide sequencies were thorough to the extent of becoming boring. As was noted earlier, most classes f'elt that strip B could be omitted, and in the second part of the experiment with group 1968E2 in the Autumn term most teachers did in fact make less use of this strip. The test results for this batch do not reveal clearly, however, whether this had any effect on the standard achieved. On the basis of these findings certain recommendations can be made. The first, and most important, is that the course should include the original grapheme recognition exercises, and that anyone teaching with it should always take care to ensure that children are fully conversant with the various grapheme shapes. It is only when a reader understands the phonetic basis of a writing system that he can begin to read creatively, by interpreting for himself words that he has not met in print before, and even at the primary level teachers should be aiming at giving their pupils such a mastery of the system.

To the problem of interference from English there is no obvious remedy suggested by the experiment. No doubt continued practice will eventually eradicate the problem as it does with pupils learning to read French later in life. All the same, it would be preferable if one could prevent the problem arising.

There are two other areas where one would like to make recommendations, although in one case the evidence is not strong enough to bear a detailed proposal. The first case is that of progressing to the reading of books. Several classes did move on to "reading for sense" either during the course or immediately after it. The most successful were classes B and Dl , and from the experience of some of the other classes it is clear that the choice of a first reader is an important one, and so is the choice of the correct moment to start on such a reader. This will depend very much on the nature of the class itself, but some of the readers used by classes $B$ and $D 1$ seemed to provide the sort of material required. The area where one is on much less reliable ground is that of introducing writing. Admittedly Cole states that "reading and writing are closely inter-related and there is little doubt that skill in one helps the other" (1.) However, little firm evidence was provided in this project as to when and how one should introduce writing. Teachers were asked not to introduce writing during the experiment, and as far as is known none of them did with the first group in 1968. In fact only two teachers and the first research student herself reported allowing the children to do any writing themselves. The research student had allowed children to write short sentences on the board after they had first been spoken; this had taken place only when the research student had been near at hand to correct any mistakes. At the end of the course she had allowed her better class, Class 1 , to write a short composition entitled "Ma Maison", and this they had done quite well. However, a dictation had been done
badly (2.). Teacher D1 also allowed his children to do some writing after completing the course; this was in connection with the B.B.C.'s "Chasse au Trésor" series, and once again the results were quite pleasing? (3) Finally there is the case of class $2 B$, who started some controlled iriting very early on in the course, and then produced very good results on test VLAR. (4.) The evidence seems to suggest that better pupils can cope with writing, even if introduced quite early on in the reading course, as long as the teacher maintains a tight control over what is being written. It would be unwise to draw any conclusions beyond this from the results of this experiment. In spite of certain failings mentioned above, it is clear that the course as a whole benefit';ed many of the pupils being taught with it. Since the absence of grapheme exercises has already been regretted, it might be worth recalling at this point that many pupils did gain an understanding of the French grapheme system, and evidence of this was obtained from tests of type 2 as well as from certain classroom observations. Repeated instances in both of these situations of children correctly pronouncing or spelling completely new words indicates that the course, even in its deprived form, is capable of making this important contribution to the pupils' French reading skill.

There still remains the question: how many children have benefitt'ed from the course? It is difficult to answer this question, since none of the measuring techniques used gave a clear pass-fail line, and indeed it would be foolish to expect to find one. One can only examine the test results and compare them with the standard achieved
by the grammar school pupils, bearing in mind that this will not enable one to say that one section of the group can now read French, and another not. All the same, on this basis it is possible to arrive at two tentative measures of success, one an optimistic one, and the other a more cautious one. The optimistic measure of success is based on three assumptions: that the Viens Lire tests are fair tests of French reading (which they may not be); that the majority of the grammar school group are at least moderately competent in French reading (which also may not be the case); and that a cut-of'f line of one standard deviation below the mean on the grammar school distribution is a fair standard to expect of a moderately successful French reader. On this basis Appendix H suggests that anything from 42 to 74 percent of the primary school children have achieved at least a moderate command of French reading. The statistics behind this are of course fairly arbitrary; nevertheless the argument does have one small point in its favour, and that is that all the teachers using the course had the impression that a large majority of their pupils were gaining something from it.

Taking a more cautious approach one can look once again at the results achieved by the grammar-school potential children in the primary school classes. (5.) Even the top $25 \%$ of the ability range have more or less equalled the grammar school control sample in achievement; the top $20 \%$ have done even better. In this comparison it was possible to eliminate some though not all of the irrelevant differences between the two groups; the question still remained as to whether
the tests themselves were valid, of course. Nevertheless, such statistical evidence as there is does seem to back up the impressions gained in the classroom by the research student and the teachers themselves. These were: that the non-readers in English and a small number of the less able English readers were making little or no progress in French reading; that the large majority of pupils in the middle ability range had acquired a moderate-to-good command of French reading which extended to a rudimentary grasp of French phonetics; and that the very best pupils, up to approximately the top $20 \%$, had quickly pi.cked up a good reading ability with little difficulty and had in some cases also made the transition to writing.

The results of this experiment do point to one remaining problem, which if it proves real may cause some difficulty. This is that some less able children may not be able to jump the hurdle of French reading, and therefore may feel that they have stopped making progress in the subject as a whole. How this problem is tackled is a question to which this experiment cannot provide an answer; it may be that some other method might enable them to overcome their difficulties in reading French; or that their approach to the problem should be a slower one; or that they may have to remain at the oral stage, in which case their curriculum will need careful thought. This problem of "levels of ability below which the teaching of a foreign language is of dubious value" ${ }^{(6 .)}$ is one which up to now has only faced. secondary schools in the main; if reading of French is introduced on a large scale at the
primary level then it may become a major problem there too. Overall, the Viens Lire experiment appears to have been neither a total success nor a complete failure. As a means of investigating one aspect of French teaching it has been very useful. On the teaching side problems remain, some of which are easier to solve than others. On the other hand the course has clearly enabled some pupils to achieve a very pleasing standard of reading. For the majority it has provided a well-structured introduction to French reading, and that was what it set out to do.

## Notes to Chapter 16.

(1) Cole, L. R. Teaching French to Juniors, page 97.
(2) See Chapter 7, page 95.
(3) See Chapter 11, page 141.
(4) See Chapter 14 , page 176 .
(5) See Chapter 13, page 160 and Appendix E, page 305.
(6) Schools Council, Working Paper No. 8, page 3.

See also Chapter 1., page 4.

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## APPENDICES

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## The following abbreviations are used:-

## For experimental groups:-

1967E - Experimental groups of two primary classes, 1967.
19676 - Control group of 12 grammar school classes, 1967.
1968E - Experimental group of eight primary classes, 1968. 1968e(1) - A sub-sample of the above. See Chapter 14. 1968E(2) - Second experimental group of five classes, 1968.

## For Tests:-

EPC2 English Progress Test C2 - N.F.E.R.
NV3 Non-Verbal Test 3 -N.F.E.R.
PV3 Primary Verbal Test 3 - N.F.E.R.
VLA1, VLA2, VLA3, VLB1, VLB2, VLB3, VLC1, VLC2, VLC3 are the nine Viens Lire Tests. See Chapter 6 notes.

## Appendix A.

Text of the nine-unit French reading course Viens Lire
and of the instruction leaflet sent out to all classes taking part in the experimental group of 1968.

1. Texts of nine lessons.
2. Texts of exercises (omitted from course in 1968).
3. Text of instruction booklet.
4. Illustration of slides.

A CH C

A Papa va à la table.
G Ça va, petit gargon?
CH Michel cherche son chat.

## 1. AU MAGASIN

Mch. Bonjour Madame. Je m'appelle Michel.
Mme. Bonjour, petit garçon. Ga va?
Mch. Qui, ga va merci.
Mme. Tu achètes?
Mch. J'achète du chocolat et quatre gâteaux s'il vous plait.

Mme, Voilà. Tu as un sac?
Mch. Oui, voilà. Merci Madame.

## I (Revise A, $\mathrm{Ch}, \mathrm{C}$ )

A. Alice est l'ami de Sophie.

## 2. LE LIVRE

J. Bonjour, petite fille. Tu t'appelles Marie?
M. Bonjour, petit garçon. Oui, je m'appelle Marie. Ça va?
J. Oui, ça va merci.
M. Tu regardes un livre?
J. Oui, je regarde un livre. Viens ici Marie. Regarde!
M. Qu'est-ce que c'est?
J. C'est un chat. Il monte vite sur l'arbre.
M. Qu'est-ce que c'est?
J. C'est une souris.
M. Alors le chat a peur de la petite souris?
J. Non, non, regarde ici. Voici un chien. Il est gros. Le chat a peur du gros chien. Toi aussi tu as peur des chiens?
M. Ah oui.

## 0 AI EAU (Revise I)

O C'est la robe rose de Sophie.
AI Mais j'ai du lait.
EAU Je prends un morceau de gâteau.

## 3: EST-CE QUE MICHEL A FAIM?

Il fait beau mais Michel n'est pas gai.
Mmn. Michel, regarde ici.
Mch. Qu'est-ce que c'est?
Mmn. C'est un gâteau.
Mch. Non, merci Maman.
Mrmn. Tu prends une pomme?
Mch. Non, merci Maman. Je n'ai pas faim.
Mmn. Est-ce que tu prends une petite pomme?
Mch. Non, merci Maman.
Mmn. Mais, est-ce que tu as quelque chose?
Mch. Je ne sais pas.
Mmn. C'est vrai? Ģa ne va pas, mon petit?
Mch. Ģa va, merci Maman.
Mmn. Est-ce que tu prends un petit morceau de chocolat?
Mch. Non, merci Maman.
Mmn. Tu prends un gros morceau alors?
Elle donne le moroeau à Michel.
Mch. Ah oui, s'il te plait, Maman. Oh, que j'ai faim!

## EU OU (Revise EAU)

EU De quelle couleur est la fleur? Elle est bleue.
OU La poule est rouge mais la souris est grise.
4. LA FETRE DE MARIE

Mmn. Bonjour Marie. Bonne fête. Écoute, on frappe à la porte.

Marie court à la fenêtre.
Mre. C'est un homme. Il a un gros manteau bleu. Qui est-ce? Ah oui, c'est le facteur.

Elle ouvre la porte.
F. Bonjour. J'ai deux paquets et neuf cartes pour Marie. Bonne fête ma petite.

Mre. Merci, monsieur. (unwraps packet) Qu'est-ce que c'est? (disappointed) Oh, c'est un gros mouchoir! (unwraps handkerchief) Mais voilà une poupée aussi. Oh, regarde ses cheveux. Elle a des fleurs rouges. Elle est jolie.

Mch. Bonne fête Marie. Voilà mon cadeau.
Mre. C'est ton vieux bateau bleu. (laughs) Merci, Michel.

Mch. Voilà Minou. Il a un cadeau pour Marie aussi.
Mre. Aie! C'est une souris. J'ai peur. Oh non, merci Minou, je prefère ma poupee.

## É OI

É L' éléphant méchant écoute au téléphone.
OI Voilà deux poissons pour moi et trois pour toi.

## 5. LA FETE DE MARTE (Cont.)

P. Bonne fête Marie. Voilà mon cadeau pour toi.

Mre. Pour moi, papa? C'est énorme. Est-ce que c'est un éléphant?
P. Non, ce $n^{\prime}$ est pas un éléphant. Regarde!

Mre. C'est un poisson rouge. Mais non, ce $n^{\prime}$ est pas vrai. Il y en a trois. Il y a trois poissons rouges. Merci beaucoup, papa. Le téléphone sonne.

Mrn. Allô, qui est-ce? Répétez, s'il vous plaît. Ah, bonjour René ........... Dépêche-toi, Marie. Ecoute!

Mre. Bonjour, René. On va au cinéma? Chic alors, c'est un joli cadeau. A trois heures au cafe? Oui. Au revoir. Toi aussi, Minet, tu as un cadeau pour moi? $0 h$, c'est un oiseau, un petit oiseau noir. Il n'a pas peur. Merci beaucoup, Minet, mais tu es méchant, tu sais.

## ON U

ON Les garçons ne sont pas à la maison. $\underline{\mathrm{U}}$ Tes chaussures sont sur le mur.

## 6. LES CHATS MÉCHANTS

Il fait noir et il y a des nuages. On ne voit pas la lune. Dans la rue, on voit deux ombres. Minou et Minet sont sur le mur.

Ils passent par une fenêtre. Ils ont faim. Il y a des bonbons mais ils $n$ 'aiment pas les bonbons. Il y a de la confiture mais ils n'aiment pas la confiture. Les chatons montent sur le buffet. Ils regardent les poissons. Les poissons ont peur. Minou met sa tête dans le bol.

Voilà Marie. Elle quitte ses chaussures. Elle allume. Minou a peur. Il tombe dans l'eau. Mre. "Oh non, Que tu es méchant!" Elle va vite au buffet. Les deux chatons tombent par terre.

Marie compte les poissons. "Un ... deux ... trois. Ils sont tous là. Minou, Minet, venez ici!" ...... Mais les chatons ne sont pas à la maison.

## AU J

AU J'ai des chaussettes jaunes aussi.
J Je vais jouer dans le jardin.

## 7. QUI EST BETE?

Les chats jouent dans le jardin mais Michel et Marie sont toujours au lit.

Mmn. Bonjour, Michel. Bonjour, Marie. Venez dejeuner.
Michel saute du lit.

Mch. Je ne vois pas mes chaussettes jaunes.
Marie saute du lit aussi.
Mre. Et mes chaussettes bleues?
Mch. Les voilà par terre.
Marie met ses chaussettes et sa joile jupe rouge. Elle prend ses chaussures.

Mch. (laughs) Que tu es bête! Regarde tes pieds!
$T u$ as une chaussette jaune et une chaussette bleue. C'est très joli! Ia ha ha! Que les jeunes filles sont bêtes!.

Mre. Toi aussi, regarde tes pieds!
Michel regarde son pied gauche.
Mch. Et alors? C'est ma chaussette jaune.
Mre. Et l'autre pied?
Michel regarde. Voila la chaussette bleue de Marie.
Mre. Que les garçons sont bêtes!

## EN IN ILLE

EN J'entends les enfants.
IN Il y a cinq sapins dans notre jardin.
ILIE Les feuilles brillent au soleil.

## 8. PAPA ET L'CISEAU

C'est le printemps. Papa dort dans le jardin. Il y a un oiseau dans un sapin. Il cherche des feuilles mais il n'y a pas de feuilles dans le jardin. Il cherche de la paille mais il n'y a pas de paille.

Les cheveux de papa brillent au soleil.
L'oiseau pense:-
"Voilà de la paille."
Il est content. Il descend du sapin. Il commence à tirer doucement ...
Ça ne va pas ... Il tire encore ... Ça y est. Mais attention, papa ouvre ses yeux!
"Comment? Qu'est-ce qu'il y a?"
L'oiseau prend vite les cheveux et il s'envole.
Papa regarde mais il ne voit rien sur le chemin. Il écoute mais il n'entend rien dans le jardin. Mais si; il y a petit oiseau noir dans un sapin.

## AN IEN (Revise EN)

AN Maman a un manteau blanc.
IEN Viens ici mon petit chien.

## 9. AU MAGASIN

Marie prend son manteau.
Mre. Viens, Toto, on va au magasin. Toto, le chien, et Marie vont au magasin.

Mre. Bonjour, Madame. Je prends le grand gâteau blanc, s'il vous plaît. C'est bon?

Madame Bien sur, c'est bon. Tiens, voilà.
Mre. Et la grande sucette blanche et orange s'il vous plait. Ga fait combien?

Madame Tiens, mon enfant. Ga fait deux francs soixante centimes.
Mre. Voilà trois francs.
Elle met le gâteau et la sucette dans son sac. Le chien regarde. Il a faim aussi. Il mange tout. Marie ne voit rien.

Madame Et voilà quarante centimes. Au revoir.
Mre. Au revoir, madam et merci. Viens, Toto, viens manger. Mais il n'y a rien! Ah, méchant, que tu es gourmand. .

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## $T \mathrm{~T}+\mathrm{"-ES} \mathrm{C}: \mathrm{JE}+\mathrm{H}-\mathrm{E} "$

> 1. Tu regardes une souris?
> Oui, je regarde une souris.
> 2. Tu cherches le chien?
> Oui, je cherche le chien.
> 3. Tu achètes un livre?
> Oui, j'achète un livre.
> 4. Tu montes sur la table?
> Oui, je monte sur la table.

Procedure
A. Children read the sentences.
B. Teacher dictates two elements for reinforcement.
C. Each child composes a "tu" question of his own, using one of the four verbs and passes it on to his neighbour.
D. Neighbour replies and gives the book back.
E. Ask three pairs to write their efforts on the blackboard simultaneously, meanwhile checking other answers.

## UN : UNE LE : LA

1. Voici Michel et voilà Marie.
2. Voici un garçon et voilà une fille.
3. Voilà un chat et voici une souris. C'est le chat de Marie. C'est la souris de Michel.
4. Voilà un livre et voici une table. C'est le livre de Michel. C'est la table de Marie.
5. Voici un gâteau et voilà une carotte. C'est le gâteau de Marie. C'est la carotte de Michel.

## Procedure

The purpose of this course is to teach recognition and - if desired production of the graphic equivalents of familiar oral material. The singular articles, masculine and feminine, definite and indefinite, present no real problem of recognition or production, following an oral stimulus, since they do not elicit inflexional variations. Here, they are juxtaposed in a brief reading exercise to reinforce what will probably already have been acquired from the dialogues.

## A AI QU'EST-CE QUE?

1. Maman a un sac. Elle achète du lait.
2. Est-ce que c'est vrai, Marie?
3. Je ne sais pas, Madame.
4. Il ne fait pas beau mais Marie est gaie.
5. Qu'est-ce que tu achètes?
6. J'achète du chocolat au lait, s'il vous plaît.
7. Qu'est-ce quil fait?
8. Il va à la maison.
9. Qu'est-ce que tu as?
10. Regarde, j'ai un petit chat.

## ELLE/IL + "-E" : SINGULAR TMPERATIVE + "-E" : JE + "-E"

1. Marie : J'achète une robe?
Maman : Oui, achette une robe:
Elle achète une robe.
2. Michel : Je donne la pomme à Marie?
Maman : Oui, donne la pomme à Marie!
Il donne la pomme à Marie.
3. Marie : Je cherche le chat?
Maman : Oui, cherche le chat:
Elle cherche le chat.
4. Michel : Je monte sur 1'arbre?
Maman : Oui, monte sur l'arbre:
Il monte sur l'arbre
5. Michel : Je regarde ici?
Maman : Oui, regarde ici:
Il regarde.

## Procedure

Explain the difference between "tu cherches le chien" and "cherche le chien!"

This exercise revises je + "-e" and reinforces the identical inflexional endings of il + "-e" and the singular imperative. The procedure is the same as in Exercise 1, Unit 2, except that each operation involves three pupils instead of two.

1. Est-ce que tu donnes le livre à papa? Non, je ne donne pas le livre à papa.
2. Est-ce que tu cherches la maison?

Non, je ne cherche pas la maison.
3. Est-ce que je monte sur le chien?

Non, tu ne montes pas sur le chien.
4. Est-ce que je regarde un livre?

Non, tu ne regardes pas un livre.
5. Est-ce que tu achètes la robe?

Non, je $n^{\prime}$ achète pas la robe.

## Procedure

As before.
This exercise also serves to revise je + "-e". tu + "-es".

## J'AI : TU AS : IL A

1. Michel Est-ce que j'ai du chocolat?

Marie Oui, tu as du chocolat.
Anne Il a du chocolat.
2. Marie Est-ce que tu as le sac?

Michel Non, je n'ai pas le sac.
Anne Il $n^{\prime}$ a pas le sac.
3. Michel Est-ce que tu as les carottes?

Marie Non, je $n^{\prime}$ ai pas les carottes.
Anne Elle n'a pas les carottes.
4. Marie Est-ce que j'ai le gâteau?

Michel Non, tu n'as pas le gâteau.
Anne Elle n'a pas le gâteau.
5. Marie Est-ce que tu as peur?

Michel Mais non, je n'ai pas peur.
Anne Il n'a pas peur.

## Procedure

1. Children compose sentences by analogy with 1-4, changing only the noun and modifier. e.g. l. Est-ce que $j$ 'ai une pomme etc.
2. Activity in threes by analogy with 2 or 3: as before. This exercise revises est-ce que .. .. ? and ne .. .. pas.

## $0 \quad 0$

1. Voilà un homme. Il a du chocolat pour Minou.
2. Il ouvre un sac. Il donne un gros mouchoir à Michel.
3. Sophie joue avec une pomme rouge.
4. La souris court. EIle a un morceau de carotte.
5. Bonjour, Marie. Est-ce que tu as quelque chose?
6. Minou ouvre la porte.
7. La poule est rouge et rose. Elle est jolie.
8. De quelle couleur est la robe de la poupée de Sophie?
9. J'ai deux morceaux de chocolat pour vous.
10. Ecoute, l'homme court à la porte.
11. Maman a neuf pommes et deux gâteaux pour vous.
12. La souris joue avec Minou: Elle n'a pas peur.
13. C'est une fleur rouge pour Papa. Elle n'est pas bleue.
14. Écoute, le vieux facteur ouvre la fenêtre.
15. Michel court. Il a neuf fleurs pour Maman.
16. De quelle couleur sont les deux poupées?
17. Elles sont bleues et rouges. Regarde les jolis cheveux!
18. Le vieux monsieur joue avec les poules.
19. De quelle couleur est le mouchoir?
20. Bonjour, monsieur. Est-ce que vous êtes le facteur?

## AGREEMENT OF ADJECTIVES : "-E" WITH FEMININE NOUNS

A. C'est un petit livre gris.

C'est une petite souris grise.
B. Voild le petit chien gris.

Voila la petite poupée grise.
la. Michel est petit et Marie aussi est petite.
b. Jacques est petit - et Anne? (et Anne aussi est petite). etc. " " " etc.
2a. Michel est gai et Marie aussi est gaie.
b. Papa est gai -et Maman?
etc." " " etc.
3. Le rat est petit/la souris?
4. Le manteau est joli/la dame?
5. Le mouchoir est bleu/la robe?
6. L'arbre est vert/la maison?
7. Le bateau est joli/la poupee?
8. Le gâteau est petit/la pomme?
9. Le rat est gris/la souris?
10. Le sac est vert/la pomme?

## Procedure

1. Teach "le rat" and "vert(e)".
2. Write $A$ and $B$ on the board. Children read and repeat until they are known by heart, since they can serve as "key-sentences" for subsequent reference.
3. Write la on the board and read with the class.
" lb. " " " " " " "
4. Children compose their own sentence by analogy, using a boy's and a girl's name.
5. Check, erase "master-sentence" and children create more sentences by changing only the name.
6. Proceed in the same way for 2.
7. Dictate the first part of 3 , give the children the stimulus and ask them to complete.
8. Check, similarly 4-10.

## "-S" FOR PLURAL OF ADJECTIVES AND NOUNS

A. Voilà les arbres verts. Ils sont grands. Voilà les maisons vertes. Elles sont grandes.
B. Voild des mouchoirs bleus. Ils sont jolis. Voilà des fleurs bleues. Elles sont jolies.

1. Les garçons sont gais et les filles aussi sont gaies.
2. Les sacs sont rouges et les carottes aussi sont rouges.
3. Les chats sont petits/les souris?
4. Les arbres sont gris/les maisons?
5. Les mouchoirs sont verts/les robes?
6. Les paquets sont jolis/les cartes?
7. Les arbres sont grands/les maisons?
8. Les rats sont gris/les souris?
9. Les arbres sont grands/les pommes?
10. Les hommes sont gais/les dames?

## Procedure

1. Teach "grand(e)(s)".
2. Learn A. by heart as "key-sentences".
3. Write 1. on the board and read with the class.

Repeat for 2., explaining that uninflected form of "rouge" ends in "-e".
4. Dictate the first part of 3., give the children the stimulus and aslc them to complete.
5. Check. Similarly 4-10.

## ILS + "-ENT"

A. Minou tombe et Minet aussi tombe par terre. Ils tombent par terre.
B. Marie aime les bonbons et Maman aussi aime les bonbons. Elles aiment les bonbons.
C. Michel monte et Marie aussi monte sur la chaise. Ils montent sur la chaise.

1. G. frappe à la porte et $G$. aussi frappe à la porte. Elles frappent à la porte.
2. B. ouvre la fenêtre et B. aussi ouvre la fenêtre. Ils ouvrent la fenêtre.
3. G. écoute l'oiseau et B. aussi écoute. Ils écoutent l'oiseau.
4. G. achète un gâteau et G. aussi achète un gâteau. Elles achètent un gâteau.
5. B. cherche le chien et G. aussi cherche le chien. Ils cherchent le chien.
6. B. allume et B. aussi allume. Ils allument.
7. La dame regarde la lune et sa fille aussi regarde la lune. Elles regardent la lune.
8. Le monsieur cherche la rue et le garçon cherche aussi. Ils cherchent le rue.
9. Le chat passe par la porte et la souris aussi passe par la porte. Ils passent par la porte.
10. Le chocolat tombe et la confiture aussi tombe par terre. Ils tombent par terre.

## Procedure

1. Read A., B., C. until familiar. Examples remain on board with the names clearly underlined.
2. Teacher dictates - or merely reads as a cue-first part of 1-6, substituting a boy's name for "B", a girl's for "G". The children complete the second part. Check at intervals.
3. Similarly, 7-10.

## $0 \quad \mathrm{OI}$

1. Voici la porte. Elle n'est pas rose. Elle est noire.
2. Regarde, il y a trois gros poissons roses.
3. Au revoir. Voici René. Il sonne à la porte.
4. Toi, tu as une robe noire.
5. Donne-moi trois pommes, $s^{\prime}$.
6. Voilà le gros mouchoir de Sophie.
7. Comment? Voilà un oiseau énorme.
8. L'homme regarde l'oiseau noir. Il est joli.
9. Moi, j'ai trois morceaux de chocolat.
10. Toi, tu as un morceaux énorme.

## AI OI

1. Tu as un poisson, mais moi, $\mathrm{j}^{\prime}$ ai un oiseau.
2. Regarde, c'est vrai. Il y a trois maisons noires.
3. Est-ce que tu as du lait pour moi, s'il te plaît?
4. Oui, j'ai du lait. Voilà. C'est pour toi.
5. J'achète trois poissons, s'il te plaît.
6. Est-ce qu'il fait noir?
7. Je ne sais pas. Toi, tu n'es pas gai?
8. Au revoir. Voici Michel. On va à la maison.
9. J'ai un mouchoir mais il est noir.
10. Maman, il y a quatre possons dans le lait.

## E EU

1. De quelle couleur sont les cheveux de Michel?
2. Dépêche-toi. C'est le vieux facteur.
3. Elle va au café à deux heures et à sept heures.
4. Michel achète des fleurs pour Maman.
5. Elle cherche papa. Elle a peur.
6. Voilà sept livres bleus et deux paquets.
7. Merci, monsieur. Les fleurs sont jolies.
8. Minet a peur. Voila le gros facteur.
9. J'achète neuf berets bleus.
10. Le vieux monsieur cherche la fenêtre.

## E $E$

1. Écoute, Michel t'appelle au téléphone.
2. C'est ma poupée. Elle a une tête énorme.
3. Dépêche-toi! Elle va au cinéma.
4. Il met le téléphone per terre.
5. Michel est méchant. Il est au café.
6. René achète une poupée pour elle.
7. Merci René, mais je préfère un éléphant.
8. Dépêchez-vous! C'est un paquet énorme.
9. Écoute, tu es méchant, Minet.
10. La tête de l'éléphant passe par la fenêtre du café.

## 0 ON

1. Les garcons sonnent à la porte de la maison.
2. Voilà le bol et voici mon poisson. Il est gros.
3. Bonjour Sophie. On va au téléphone?
4. Regarde. Le garçon donne des bonbons énormes à ton chien.
5. Non, les pommes ne sont pas roses.
6. Les chatons tombent dans le bol.
7. Il y a de la confiture et un morceau de chocolat. Que c'est bon!
8. Les hommes ont mon chocolat.
9. Voilà l'ombre de Sophie. Elle compte ses jolies robes.
10. Est-ce qu'on cherche des pommes à la maison alors?

## 6

$\mathrm{U} \quad \mathrm{OU}$

1. De quelle couleur est la lune?
2. Ils ouvrent la porte et ils allument.
3. Mais non, les nuages ne sont pas rouges.
4. Le mouchoir est sur le buffet.
5. Écoute, il y a une poule dans la rue.
6. Minou court sur le mur.
7. Bonjour, est-ce que tu as des chaussures rouges?
8. Minou joue dans la rue.
9. Il y a de la confiture pour vous sur la table.
10. Tu prends les chaussures pour ta poupée?
A. Le mur est grand mais la maison n'est pas grande. B. La souris est noire mais le rat $n^{\prime}$ est pas noir.
11. Michel est méchant/Marie?
12. L'arbre est vert/la pomme?
13. La robe est bleue/le manteau?
14. Le paquet est petit/la carte?
15. La petite fille est gaie/le garçon?
16. Le mur est gris/la fenêtre?
17. Le bol est vert/la confiture?
18. La porte est rouge/le mur?
19. La poule est noire/l'oiseau?
20. Le bateau est grand/la poupée?

## Procedure

1. Write A. and B. on the board, read with the class and underline the key letters.
2. Dictate the first part of each sentence which the children then complete according to the given cue.

## "IL Y A" : REVISION OF "-E", "(E)S" FOR PLURAL

A. Il $y$ a un chat noir. Mais non, il y a deux chats noirs.
B. Il y a une grande chaussure.

Mais non, il y a deux grandes chaussures.

1. Il y a une grande rue.
2. Il y a un garçon méchant.
3. Il y a un poisson rouge.
4. Il y a une fleur bleue.
5. Il y a un nuage gris.
6. Il y a un arbre vert.
7. Il y a un gâteau énorme.
8. Il y a une ombre noire.
9. Il y a une tête rouge.
10. Il y a une jolie petite fille.

## Procedure

1. Explain that "énorme", like "rouge", has an uninflected form which itself ends in "-e".
2. Write $A$. and $B$. on the board, read with the class and underline the inflectional changes.
3. Read sentence 1. Pupils write only the response. Check.
4. Similarly, 2.-10.

## A AU

1. Il y a une chaussette jaune sur la table.
2. Jacques va au cinéma en auto.
3. Ma chaussure gauche est à la maison.
4. Le chat saute de l'arbre aussi.
5. Au revoir. On va à l'autre café.
6. Elle a des chaussettes jaunes et des fleurs bleues.
7. La jeune fille a peur. Elle saute de l'auto.
8. L'autre jeune fille joue à gauche. Elle a des fleurs.
9. Au revoir, Nous déjeunons à neuf heures.
10. Ils ont deux autos bleues aussi.
11. De quelle couleur sont les chaussures de l'autre jeune homme?
12. Le vieux monsieur saute au mur.
13. En France, les facteurs ont des autos jaunes.
14. J'ai deux ahaussettes et deux chaussures aussi.
15. Elle donne des fleurs jaunes au monsieur.

## AI E

1. J'ai quelque chose pour elle à la maison.
2. Minet $n^{\prime}$ est pas gai. Il cherche du lait.
3. Je m'appelle Claire. Regarde, j'ai un gros paquet.
4. Qu'est-ce qu'elle fait, s'il te plaît?
5. C'est vrai? Il y a sept maisons?
6. Mais oui, c'est vrai. Voilà les fenêtres.
7. Est-ce que c'est la fête de Claire? Moi, je ne sais pas.
8. Oui, c'est sa fête. Il fait beau. Elle est gaie.
9. J'achète du lait, s'il vous plait. Merci.
10. Michel et Minet sont à la maison.

## POSSESSIVE ADJECTIVES, 1st, 2nd, 3rd SINGULAR

A. Voici un livre. C'est ton livre, Marie?

Oui, c'est mon livre.
B. Voici un livre. C'est le livre de papa?

Oui, c'est son livre.
C. Voici une pomme. C'est ta pomme, Marie?

Oui, c'est ma pomme.
D. Voioi une pomme. C'est la pomme de papa?

Oui, c'est sa pomme.
E. Voici des cartes. Ce sont tes cartes, Marie? Oui, ce sont mes cartes.
F. Voici des cartes. Ce sont les cartes de papa? Oui, ce sont ses cartes.

1. Voici une maison. (boy)
2. Voici une jupe. (girl)
3. Voila un lit. (boy)
4. Voila un jardin. (girl)
5. Voici des chats. (boy)
6. Voici des poupées. (girl)
7. Ce sont les chiens de Marie?
8. C'est le cadeau de Maman?
9. Voilà une chaussette. (girl)
10. Voilà une chaussure. (boy)

## Procedure

1. N.B. The pronominal form before a masculine noun beginning with a vowel (e.g. ton oncle, son enfant) has been omitted. This occurs later in Unit 9. and should be delayed until that stage.
2. The class reads A.-F. The teacher underlines the significant words and the children read again individually.
3. The teacher reads 1 . and asks, half of the class, "demandez à (name of boy)."
4. The other half of the class replies in the affirmative. Check.

## POSSESSIVE ADJECTIVES, 1st, 2nd, 3rd SINGULAR (cont.)

## Procedure

5. Similarly for question 2. "demandez à (girl's name)." Emphasize that the pronomical forms for 1. and 2. are identical.
6. Similarly for 3. and 4., 5., and 6. Again emphasize that the possessive pronouns in each pair are identical.
7. Ask all the class to reply to 7. and 8.
8. Questions 9. and 10. - as for 1.-6.
I. Jean joue dans le jardin.
9. Je déjeune toujours à huit heures.
10. La jupe de la jeune fille est tres jolie.
11. J'ai un joli manteau jaune.
12. Bonjour, jeune homme. Est-ce qu'on va au jardin?

## E EN

1. Dépêche-toi: J'entends quelque chose.
2. Papa descend. Il met son enfant par terre.
3. Attention, elle commence à tomber.
4. Michel pense: "乌a n'y est pas." Il commence encore.
5. Comment? C'est la fête de son enfont?
6. Il descend et il prend sept morceaux de chocolat.
7. Elle entre doucement par la fenêtre.
8. Attention! Minet prend quelque chose.
9. Elle s'envole. Elle est tres contente.
10. Papa entend une souris. Il n'est pas content. Il cherche par terre.

## I IN

1. Il $y$ a cinq petites souris sur le chemin.
2. C'est le printemps. Alice est dans le jardin et ses amis aussi.
3. Les cinq amis de Marie jouent ici dans le sapin.
4. Chic alors: Le jardin est tres joli et le petit chemin aussi.
5. Voici Minet. Au printemps il dort dans le sapin.

## EN IN

1. C'est le printemps. Il $y$ a des fleurs dans le jardin. Maman est contente.
2. Attention! Il y a cinq enfants dans le sapin.
3. Comment? J'entends les cinq enfants sur le chemin.
4. Il pense: "Le sapin est vert. G'est le printemps."
5. Il prend le chemin du jardin et il entre.

## REVISION OF POSSESSIVE ADJECTIVES

| Voila un poisson./Marie | A. C'est ton poisson, Marie? |
| :--- | :--- |
|  | B. Oui, c'est mon poisson.- |
|  | C. C'est le poisson de Marie? |
|  | D. Oui, c'est son poisson. |

1. Voilà un chaton./Michel.
2. Voilà une chaussure./Papa.
3. Voilà des gâteaux./Maman.
4. Voilà une robe./Marie.
5. Voilà des bonbons./Suzanne.
6. Voilà le chocolat./Jacques.

## Procedure

1. Divide the class into four groups, two "questioners" and two "answerers."
2. Read the example with the class. Explain that each group will compose one sentence out of four by analogy with the corresponding one on the board. Children write.
3. Choose one child from each group to write his sentence by the side of the original example.
4. Question 2. - repeat, with each group maintaining the same role.
5. Questions 3.-6. - similarly, with the role of each group alternating question by question.
6. Comment? Le chien entre au magasin? Ce n'est pas bien.
7. Tiens, tu ne prends rien, mon enfant?
8. Viens encore. Tu as combien de centimes?
9. Il pense: "Ce n'est pas bien. Je ne suis pas content Je $n$ 'ai rien!"
10. Attention! Viens ici. J'entends mon chien.

## A. AN

1. Maman a un sac blanc.
2. Il y a quarante arbres dans le parc.
3. Papa, est-ce que l'éléphant est grand?
4. Oui, mon enfant. Regarde la carte. Il est tres grand.
5. Dans le paquet il $y$ a un bateau blanc et un bateau orange.
6. Maman a soixante francs. Elle va acheter un manteau.
7. Les enfants frappent le chat. Ils sont méchants.
8. Toi, tu as quarante francs dans ton sac mais moi, je n'ai rien.
9. Papa, tu es gourmand. Tu manges quatre gâteaux.
10. Il mange un gâteau orange et un grand morceau de chocolat.

## AN EN

1. L'enfant a soixante centimes.
2. Attention, j'entends Maman. Elle est dans le jardin.
3. J'entre dans le magasin et je prends les chaussures oranges.
4. Elle prend le manteau blanc. Elle est contente.
5. Il a quarante centimes et toi, tu as un franc. Il n'est pas content.
6. Comment est l'enfent? Est-ce qu'il est grand?
7. Maman entend quelque chose. Elle entre doucement dans la maison.
8. Comment? Il mange encore? Il est tres gourmand.
9. Est-ce que le grand éléphant commence à s'envoler?
10. Tu descend encore? Tu es méchant, mon enfant.
?
AN EN IN ON
11. Les enfants sont au magasin.
12. Maman prend le bon chemin.
13. Attention, voilà cinq grands poissons.
14. Ga fait onze france et vingt centimes, s'il vous plaît.
15. L'enfant est content. Il a cinq bonbons blancs.
16. Au printemps, les garçons jouent dans le jardin.
17. Regarde, ton chaton blanc commence a monter dans le sapin.
18. Mais non. Il n'est pas méchant. Il descend au chemin.
19. Papa et Maman vont encore au magasin.
20. Mon éléphant est tres grand. Il prend cinq aapins avec sa trompe.

## REVISION OF THE NEGATIVE AND THE AGREEMENT OF ADJECTIVES

A. C'est un arbre vert.

Mais non, ce n'est pas un arbre vert. C'est un arbre noir.
B. Il a les yeux bleus.

Mais non, il n'a pas les yeux bleus. Il a les yeux rouges.

1. Il a les cheveux gris.
2. C'est une jupe rouge.
3. Sa souris est jaune.
4. Les feuilles sont vertes.
5. Ce sont des sapins noirs.
6. C'est un bol rouge.
7. Il mange les gâteaux roses.
8. Sa poupée est jaune.
9. C'est une ombre grise.
10. Son chat est gris.

## Procedure

1. Briefly revise the colours by oral exchange.
2. The teacher reads examples A. and B. and explains that the children are to contradict him in the same way.
3. Read question 1, and give the cue "mais non .. .. " The children write.
4. Check answers and repeat for question 2.
5. Similarly, question 3., check answers and point out that, rather than repeating "les feuilles", we can substitute "elles."
6. Similarly, 4.-10.

INSTRUCTIONS ISSUED WITH COURSE

## VIENS LIRE

## An audio-visual course for teaching the reading of French to primary school children

## ATMS

The "Viens Lire" course is intended to teach the reading of French to primary school children. While the writing of French could be taught concurrently with the reading, teachers taking part in this research are asked, as far as possible, not to allow the children to write down the material.

At a time when children of primary age are still deeply involved in the acquisition of reading skills in their own language, there appears to be the danger that the spelling/sound associations of English may affect adversely the reading of French: this course is intended to avoid as far as possible such interference.

The teaching methods adopted for the "Viens Lire" course follow the same traditions as other well-known audio-visual courses with which the children may be already familiar. This should avoid the difficult transition children sometimes encounter when, having been taught by pure audio-visual methods, they move on to a course based on text books alone.

Finally, the "Viens Lire" course preserves the learning order: hearing, speaking, reading. (writing last, but not for the present within the scope of this experiment).

## DESCRIPTION OF THE MATERTAL

The course consists of nine units each centred on a small situation. The linguistic material of the course is as far as possible common to the Nuffield and the "Bonjour Line" courses, which are themselves based on "Le Français Fondanental". However, the units of "Viens Lire" are primarily composed in order to present sounds (and their corresponding
spelling forms) systematically. The systematic presentation of structure forms is assumed to have been accomplished in whateyer course has been used previously, but in fact many of these forms are repeated and practised here, providing a useful consolidation of previous work.

An outline of the basic teaching stages in the suggested method will help to make clear the diverse forms of the material of "Viens Lire". These stages are as follows:-
J. The children are taught to respond orally to the pictures of a situation. This stage continues until speech habits are fairly well consolidated, and will include the forms of "exploitation" (acting, miming, question and answer etc.) with which the children may be already familiar.
2. To the picture is added the written text for class repetition. (At this stage pupils will be responding partly to the picture stimulus, partly to the written stimulus).
3. The picture is withdrawn, leaving the words in the same relative position in the frame to assist recall of the picture if necessary. (At this stage pupils will be responding almost wholly to the written words, but relying to some extent on their recollection of the story or picture).
4. The phrases are presented to the pupils in a mixed order and not in their original positions within the frame. (Pupils can not now rely upon their knowledge by heart of the script or on their recollection of the placement of phrases on the picture).

In all the cases mentioned above, the material has ke en presented by means of strip projector and tape recorder.
5. With "Teazlegraph" materials the teacher and/or pupils build up from the material which has been taught as above, new combinations of words to allow pupils to make and read new statements.
6. The associations formed between letter groups and French sounds are consolidated by syllable practice and by inviting the children to recall words and phrases which contain these forms. It should be noted that the procedure begins with total phrase recognition and ends with an analysis of graphic forms, not vice versa. The teaching materials consist of:The Basic Film Strip (colour) This strip presents the situation on which the Unit is based. The "A" Film Strip (black and white) In this strip, each picture of the situation is presented twice, first without words, then with words added.

The "B" Film Strip (black and white) This time the picture with words is presented first, then in the following frame the picture is omitted, leaving the words in the same relative position on the otherwise blank frame. The "C" Film Strip (black and white) This strip is in two parts. The first part presents the story complete, with words only which are placed in the frame as before. The second part presents the phrases in mixed order and not in the original location within the frame.

A set of tapes giving the text of the Units and recorded by native speakers. Each tape is in three sections (separated for easy location by colour splices). The first and third sections are the same, but in the second section the spacing of the phrases is different. The sections are intended for use respectively with the Basic Film Strip, the "A" strip and the "B" strip. Teazlegraph Cloth and the words of the course written on cartridge paper cut up and backed with "teazles".

## TEACHING PROCEDURE

## 1. Golour film-strip and tape

This is used as an audio-visual course, in the first instances to give the children oral command of the material only. Suggested stages of teaching are:-
(a) Make sure that children understand the meaning by mime, illustration, question and answer etc.
(b) Let children imitate tape until they are reasonably proficient.
(c) Exploitation, by means of acting, question and answer, games and using phrases of film-strip in new situations, other than those of the film-strip, e.g. children's own experience.
2. "A" film-strip and tape (black and white)
(The picture of the situation, followed by the same picture with words superimposed).
(a) The first frame is shown, the phrase played on the tape, and the children repeat. (This is recall of material already known).
3. "B" film-strip and tape
(Picture and words on first frame, words only on following frame).
(a) The first frame is shown, the tape is played, and the children read silently.
(b) The second frame is shown and the children read aloud.
4. "C" film-strip and tape
(Words of story only, in same position on frame as in original presentation followed by phrases in mixed order and in different positions on frame).
(a) The first set of frames is shown, the children read aloud and then the tape is played as consolidation.
(b) The second set of frames is shown and the pupils read; no tape.

## 5. Teazlegraph activities

At any time after the "A" film-strip has been introduced, the Teazlegraph materials may be used to add variety to activities in any one lesson. These may be used in various ways, e.g.
(a) The teacher says a phrase or sentence from the course and children select the elements of it and assemble them on the teazlegraph: children then read the phrase.
(b) A child says a phrase: procedure as above.
(c) The teacher puts up a phrase on the teazlegraph, to be read, or a child (or children) put up phrases to be read.

The elements of the phrases may sometimes be displayed on a table, so that children may come and select those required, or may be distributed anong members of the class, so that those holding the required element may recognise and produce it. Teazlegraph activity should be introduced gradually, and its use in the beginning should be limited to recognition and reproduction of the actual phases of the Unit being studied i.e. after using "A" and "B" film-strips of Unit One, teazlegraph activity should consist only of recognition and reproduction of the phrases of Unit One. After the use of film-strip "C" of Unit One, however, elements of any of the phrases of Unit One may be put together in different combinations, to form new phrases, e.g.
J'achète du chocolat et quatre gâteaux)

Tu as un sac | Tu as du |
| :--- |
| chocolat? |
| Tu as quatre |
| gâteaux? |
| J'achète un |
| sac. |

The teacher may initiate this kind of work, and the children will then suggest new sentences themselves.

Teazlegraph work will, of course, be cumulative e.g. after filmm strips "A" and "B" of Unit Two, phrases of both Unit One and Unit Two may be used on the teazlegraph. After film-strip "C" of Unit Two, new phrases may be made, using fresh combinations of the material of both Unit One and Unit Two.
6. Syllable practice. Blackboard (and teazlegraph if desired)

After the use of the "C" film-strip and the teazlegraph recognition and reading practice outlined above, comes the final
stage of analysis, to consolidate the associations formed between letter groups and French sounds. This may be done in various ways. For example:-

The teacher writes a word (from the course) on the blackboard and gets the children to read it, e.g. cadeau. He then underlines one of the syllables (eau) and invites the children to give him other words containing this syllable ("donnez-moi un autre mot avec "-eau"). Suggestions such as oiseau, manteau, bateau will be made and the teacher writes these on the blackboard as they are given (or gets children to select them from teazlegraph phrases). He then asks for phrases containing those words (donnez-moi une [autre7phrase avec "manteau") and writes these on the blackboard or has them composed on the teazlegraph. At this stage the children may suggest words and phrases which they have met in courses they have studied before "Viens Lire". The teacher should accept these suggestions and treat them in the same way as he would treat phrases from "Viens Lire". The teacher may, also, at his discretion, introduce words and phrases, hitherto unknown to the children, write them and invite the children to pronounce them, by analogy with known words. Words and phrases which the children may be invited to read at this stage are included in the printed text above and to the left of the basic situation script. This final activity should, however, be introduced gradually and used sparingly.

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EXAMPLES OF SLIDE FRAMES


A Iypical Title Page


Scene 1 of Lesson 8. Picture Only.
This was used (in colour) for the colour strip and for strip A.


Scene 1 of Lesson 8. Picture plus words
This was used as second illustration in the A strip and first illustration in the 3 strip.

## C'est le printemps.

Scene 1 of Lesson 8. Words only. This was used as second illustration in the $B$ strip and as the only type of illustration for the $C$ strip.

Appendix B.<br>Text of French reading tests designed for use with Viens Lire

| Name of test | Abbreviated Form | Fhen administered |
| :--- | :---: | :--- |
| T'esting Unit A | VLA | After Course Unit 4 |
| Testing Unit B | VLB | After Course Unit 7 |
| Testing Unit C | VLC | After Course Unit 9 |

This appendix also includes a sample set of instructions for one of the testing units.

## TESTING UNTT A

## Answer Sheet

TEST 1
Example bee ()
bow ()
bay ()
boy ()

1. si ()
sais ()
sous ()
seau ()
2. poux ()
peaux ()
paix ()
peu ()
3. mais ()
mat ()
mou ()
Meaux ()
4. fait ()
fou ()
four ()
feu ()
5. pair ()
pour ()
peur ()
peu ()

## TESTING UNIT A

## Answer Sheet

## TEST 2

Example My h_se is gr_n and br_n.

1. _'est un gar_on. Il _er_e du _o_olat.
2. Bonj_r, j'_n_f gât_x.
3. Il f_t b_et les fl_rs sont r_ges.
4. C'est vr_? Tu as d_x cad _x p_r moi?
5. M_s oui, voici un bat_ et une p_pée bl_e.
6. Il tr_ve un chap_ de f_tre et un bal_.
7. Je v_s s_s le ram_ or_x.
8. La _ouette _uinte' sur la sou_e.
9. Le profess_r t_sse d_cement près du f..
10. Les d_ze voyag_rs sont au b_t de l'ascens_r.

## TESTING UNIT A

## Answer Sheet

TEST 3
Example pen : pane : pain : pine

1. mais : mis : mat : met
2. peu : peau : pou : pot
3. sous : sot : seau : sa
4. les : le : lait : lit
5. chat : cas : ¢̣a : sa

## TESTING UNIT B

## Answer Sheet

## TEST 1

| Example |
| ---: |
| loud () |
| load ( ) |
|  |
| lid () |


| 1. nos ( ) | 6. ga | ( ) |
| :---: | :---: | :---: |
| noix () | cas | () |
| nus () | jas | () |
| nous () | chat | ( ) |
| 2. sous () | 7. nu | ( ) |
| cou () | né | ( ) |
| joue () | ne | ( ) |
| chou () | ni | ( ) |
| 3. faux () | 8. chaux | ( ) |
| feu () | choix | ( ) |
| fou () | chou | ( ) |
| fut () | chai | ( ) |
| 4. mais () | 9. de | ( ) |
| mis () | dé | ( ) |
| me () | du | ( ) |
| mois () | dix | ( ) |
| 5. peu () | 10. Ieur | ( ) |
| Pau () | 1 e | ( ) |
| pou () | loi | ( ) |
| pu () | Iu | ( ) |

## TESTING UNIT B

## Answer Sheet

## TEST 2

Example I s_a sm_ll b_d.

1. Le _eune gar_on regarde la _upe blan_e de Marie.
2. V_la le t_l_phone r_ge s_r le b_ffet:.
3. Ren__ssi a un vi_x mouch_r.
4. Maman, _coute. Il y a $n_{-} f{ }_{\text {_ }} \mathrm{s} x$.
5. Le fact_r c_rt _ cin_ma.
6. Elle est g_e. Elle a un cad_ _norme.
7. _les tr_ve une cr_x.
8. L_rs _apeaux sont p_nt_s.
9. C'est un bijou _in_s en _ade.
10. Elle a v_l_pl_rer.

## TESTING UNIT B

## Answer Sheet

## TEST 3

Example vine : vane : van : vain
l. à l'oie : à l'eau : allô : allée
2. joue : jet : j'ai : jus
3. pot : paix : Pau : poux
4. la boue : l'abus : l'abbé : la baie
5. vais : Vaud : vous : veau
6. eh si! : oh si! : aussi : assis
7. sais : c'est : saut : soie
8. saut : su : sais : seau
9. tres : trous : trait : trois
10. mot : moi : mais : Meaux

## TESTING UNIT C

## Answer Sheet

TEST 1
Example

1. see ( )
2. Sue ()
3. so ()
4. say ()

| 1. 1. mon | ( ) | 6. | 1. long |
| :---: | :---: | :---: | :---: |
| 2. ment | ( ) |  | 2. lin |
| 3. mine | ( ) |  | 3. lent |
| 4. mien | ( ) |  | 4. lien |
| 2. 1. doux | ( ) | 7. | 1. blanc |
| 2. dois | ( ) |  | 2. blond |
| 3. deux | ( ) |  | 3. bleu |
| 4. du | ( ) |  | 4. Blois |
| 3. 1. folle | ( ) | 8. | 1. sonne |
| 2. fille | ( ) |  | 2. sien |
| 3. file | ( ) |  | 3. sans |
| 4. fée | ( ) |  | 4. son |
| 4. 1. criant | ( ) | 9. | 1. joue |
| 2. crans | () |  | 2. jeu |
| 3. crâne | ( ) |  | 3. jus |
| 4. crin | () |  | 4. j'ai |
| 5. 1. soie | ( ) | 10. | 1. viens |
| 2. choix | ( ) |  | 2. vine |
| 3. joie | ( ) |  | 3. vents |
| 4. quoi | ( ) |  | 4. vins |

## TESTING UNIT C

## Answer Sheet

## TEST 2

Example There are f_r b_ks on the t_ble.

1. Le ch_m_ge des b_b_s sur le chem_.
2. Les c_qfants à g_che $n^{\prime}$ _t $r_{-}$.
3. Ils mar_ ent sur la pa_ aune.
4. De quelle c_l_r est l'_s_? $^{\prime}$
5. Il met ses gr_des ch_ssures et il desc_d acheter du l_t.
6. Ce n'est pas b_. Ton _s de rais_ est trop _aud.
7. Mais le m_, par c_tre, est très glac_.
8. Derrière les gr_s Pierre v_t un hib _ _ norme.
9. Il a déà $\mathrm{v}_{\mathrm{c}}$ cette $\mathrm{f}_{\mathrm{m}} \mathrm{m}$ ce.
10. _acques met la b_e sur lef..

## TESTING UNIT C

## Answer Sheet

## TEST 3

Example sail : soil : seal : sale

1. donne : dont : dans : dent
2. dés sus : des jus : décu : déchu
3. rien : rend : Rhin : rang
4. sais : ses : sois : sous
5. toit : taux : tôt : tout
6. eaux : eux : houx : aux
7. ciseaux : six oies : six os : six sous
8. Marat : marée : mare : marais
9. lai : lu : loup : les
10. tint : tant : temps : tien

## T'EACHER'S COPY <br> Instructions for the Administration of the Tests

## General Directions

The pupils write their answers in PENCIL. A supply of spare pencils should be kept at hand in case any pupil should break his point during a test. No other materials should be provided. Pens, rulers and erasers must not be used.

## TESTING UNIT A

TEST 1

## Procedure

1. The teacher distributes the pupils answer sheet for testing unit $A$ face downwards. He tells the pupils that they will hear a voice on tape speaking several French words. Some of these words may be unfamiliar, but this does not matter, because when they hear the sounds they will know how they are written.
2. The teacher tells the pupils to turn their sheets over and PRINT their names in the top right-hand corner. Then he tells them to look at Test 1. He briefly indicates the form of the test, pointing out that there are 5 questions (10, in Units $B$ and C), and under each question four words.
3. The teacher explains that the voice on tape will speak three of these words. When they hear the first word, they should write down a figure $l$ beside the word they think it is, in the space provided. When they hear the second word they should write a 2 beside the word they think it is, and similarly for the third
word. Three of the four spaces will be filled, one word will have no number by it. The numbers 1, 2. and 3. on the answer sheet will not necessarily be in that order. After each set of three words there will be a short pause, so that the pupils will know they are about to begin the next question.
4. The teacher reminds the pupils that each question will be said once only and cannot be repeated.
5. The teacher asks if there are any questions.
6. He says he is going to switch on the tape, and that they must do the English example at the beginning of the test.
7. The teacher rewinds the tape, and plays the example once again, doing it himself on the board to ensure understanding of the method.
8. When the teacher is satisfied that the pupils understand the procedure, he tells them he is going to play the tape and they will do the examples.

TEST II

## Procedure

1. The teacher tells the pupils that they will again hear a voice on tape speaking French, this time in sentences. He tells them that they will be familiar with many of the words, particularly in sentences $1-5$, but in sentences $6-10$ there may be unfamiliar ones. This does not matter, because when they hear the sounds they will know how to write them.
2. The teacher tells the pupils to look carefully at the sentences, and to notice the blank spaces which are to be filled in. He explains that the voice will read each sentence and the pupils will fill in the blank spaces. They may fill in the blanks either as the voice is speaking, or they may wait until the end of the sentence. In either case there will be plenty of time for writing, because there will be a long pause at the end of each sentence.

The next question will be announced by its number in English. e.g. Question 2. - "Bonjour .. .. .." etc. so that the pupils will be sure which question they are doing.
3. The teacher explains to the pupils that they may write above the blanks if they have not sufficient space on the line.
4. The teacher reminds the pupils that each sentence will be said once and cannot be repeated.
5. The teacher asks if there are any questions.
6. He says he is going to switch on the tape, and that they must do the English example at the beginning of the test.
7. The teacher rewinds the tape and plays the example once again, doing it himself on the board to ensure understanding of the method.
8. When the teacher is satisfied that the pupils understand the procedure, he tells them he is going to play the tape and they will do the examples.

## TEST III

1. The teacher tells the pupils to turn to Test III.
2. He explains that there will be no tape for this test.
3. He explains that out of the set of four words in each question the pupils must underline the two which sound the same.
4. He reminds the pupils that final consonants in French are often silent. (e.g. le chat, la souris, des cheveux).
5. He draws their attention to the example in English at the head of the exercise.
6. He then tells the children to begin. At the end of testing Unit A, the teacher stops the tape and collects the answer sheets. He then distributes the answer sheets for the next testing unit. THE SAME INSTRUCTIONS APPLY FOR TESTING UNITS B AND C. In these units the English examples for Tests I and II are on the tape, so that the teacher should do these on the board as in Unit A.

Further detailed instruction may not be necessary.

## Appendix C.

Description of the grammar school control group. Description of the two experimental classes used in 1967.

## The Grammar School Control Group

$$
N=334
$$

|  | Classes | Boys | Girls | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | 4 | 65 | 48 | 113 |
| School 1 | 4 | 6 | 60 | 69 |
| School 2 | 5 | 129 |  |  |
| Total | 3 | 40 | 52 | 92 |

Age: Second-year secondary: 12+

## The experimental classes

> Class $1 N=31$
> Class $2 N=34$
> Total $N=65$

|  | Boys | Girls | Total |
| :---: | ---: | ---: | ---: |
| Class 1 |  |  |  |
| Class 2 (4th year) | 8 | 31 | 31 |
| Class 2 (3rd year) | 14 | 6 | 14 |
| Total | 22 | 43 | 65 |

Age at 1st September, 1966

| Class | Oldest member | Average | Youngest member |
| :---: | :---: | :---: | :---: |
| 1 (4th year) | 11.3 | 10.8 | 9.7 |
| 2 (3rd year) | 10.0 | 10.6 | 10.0 |

Attainment Test Scores

|  | EPC 2 | NV 3 | PV 3 |
| :--- | :---: | :---: | :---: |
| Class 1 <br> Class 2 <br> Total | 111.86 <br> 98.85 | 104.42 <br> 99.03 | 106.03 <br> 99.94 |

Standard deviations for whole group

| EPC 2 | NV 3 | PV 3 |
| :---: | :---: | :---: |
| 12.43 <br> 62 | 11.84 <br> 62 | 12.71 <br> 63 |

## Appendix D.

## Description of the 1968 experimental groups.

First group : 8 classes January-July 1968 (Group 1968F)
Second group : 5 classes September-December 1968 (Group 1968E2)

First (Main) group of 8 classes, January-July, 1968

| Size of Group |  |  | Size of sample present |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Boys | Girls | Totel | $\frac{\mathrm{ral}}{\text { Boys }}$ | $\frac{\text { tests }}{\text { Girls }}$ | Total |
| A | 16 | 21 | 37 | 16 | 19 | 35 |
| B | - | 24 | 24 | - | 19 | 19 |
| C | 18 | 21 | 39 | 14 | 15 | 29 |
| D1 | 18 | 24 | 42 | 16 | 17 | 33 |
| D2 | 21 | 23 | 44 | 15 | 16 | 31 |
| E1 | 21 | 16 | 37 | 15 | 9 | 24 |
| E2 | 25 | 13 | 38 | 19 | 11. | 30 |
| E3 | 24 | 17 | 41 | 20 | 12 | 32 |
| Totals | 143 | 159 | 302 | 115 | - 118 | 233 |

Size of two halves of class A present for all tests

|  | Boys | Girls | Total |
| :---: | ---: | ---: | :---: |
|  |  |  |  |
| $11+$ group <br> lo+ group <br> Total | 10 | 13 | 23 |

Age of group at beginning of experiment

| Class | Oldest <br> Member | Average | Youngest <br> Nember |
| :--- | :---: | :---: | :---: |
| A (11+ $)$ | 11.4 | 10.11 | 10.5 |
| A (10+ | 10.3 | 9.11 | 9.6 |
| B | 11.9 | 11.0 | 10.0 |
| C | 11.4 | 10.10 | 10.5 |
| D1 | 11.4 | 10.11 | 10.5 |
| D2 | 11.4 | 10.10 | 10.5 |
| E1 | 11.4 | 10.10 | 10.5 |
| E2 | 11.4 | 10.10 | 10.5 |
| E3 | 11.3 | 10.10 | 10.5 |
| Total | 11.9 | 10.10 | 9.6 |

## Results of Attainment Tests

| Class | EPC2 | NV3 | PV3 |
| :--- | ---: | ---: | ---: |
| A | 104.14 | 98.06 | 99.71 |
| A(11+) | $(101.4)$ | $(94.7)$ | $(95.7)$ |
| A(10+) | $(109.0)$ | $(104.4)$ | $(106.5)$ |
| B | 112.15 | 103.26 | 104.95 |
| C | 103.52 | 102.76 | 102.83 |
| D1 | 109.79 | 111.67 | 112.79 |
| D2 | 104.81 | 105.81 | 99.77 |
| E1 | 98.33 | 98.75 | 96.21 |
| E2 | 99.07 | 101.47 | 99.70 |
| E3 | 102.93 | 104.43 | 102.19 |
| Total | 104.19 | 103.41 | 102.36 |
|  |  |  |  |

## Standard Deviations for total group

| EPC2 | NV3 | PV3 |
| :---: | :---: | :---: |
| 11.26 | 12.85 | 13.16 |

$N=233$

Attainment scores of two sexes, excluding class B

|  | EPC2 | NV3 | PV3 |
| :--- | :---: | :---: | :---: |
| Boys | 102.3 | 104.0 | 102.4 |
| Girls | 104.5 | 102.7 | 101.8 |

## First (main) group January-July, 1968

Specially selected sub-group for comparison with second (follow-up) group of five classes (see below). 1968玉(1).

This sub-group excludes classes $A$ and $C$ which had no equivalents in the follow-up group. Within the six other classes those absent for testing unit VLB are included back in, since comparison was needed for the Attainment Tests and unit VLA only.

Size of sample present for all tests

| Class | Boys | Girls | Total |
| :--- | :--- | :--- | :--- |
| B | - | 19 | 19 |
| D1 | 17 | 19 | 36 |
| D2 | 16 | 17 | 33 |
| E1 | 17 | 12 | 29 |
| E2 | 19 | 11 | 30 |
| E3 | 21 | 13 | 34 |
| Total | 90 | 91 | 181 |

Results of Attainment Tests

| Class | EPC2 | NV3 | PV3 |
| :---: | ---: | ---: | ---: |
| B | 112.16 | 103.26 | 104.95 |
| D1 | 110.19 | 112.00 | 113.61 |
| D2 | 104.97 | 106.21 | 99.97 |
| E1 | 98.83 | 100.17 | 97.34 |
| E2 | 99.07 | 101.46 | 99.70 |
| E3 | 102.15 | 103.47 | 101.32 |
| Total | 104.27 | 104.79 | 102.99 |

Standard Deviations for total sub-group

$\mathrm{N}=181$

Attainment scores of the two sexes

|  | EPC2 | NV3 | PV3 |
| :---: | :---: | :---: | :---: |
| Boys | 101.8 | 104.6 | 102.4 |
| Girls | 106.7 | 105.2 | 103.7 |

## Second (folllow-up) group of 5 classes, September-December, 1968

Size of group

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Boys | Girls | Total | Size of sample pre sent <br> for all tests <br> Goys <br> Girls |  |  |
| Total |  |  |  |  |  |  |$|$

Age of group at September, 1968

| Class | Oldest <br> member | Average | Youngest <br> member |
| :---: | :---: | :---: | :---: |
| 2 B | 11.8 | 10.7 | 9.11 |
| 2 D 1 | 11.1 | 10.9 | 10.3 |
| 2 D 2 | 11.1 | 10.8 | 10.2 |
| 2 E 1 | 11.1 | 10.8 | 10.2 |
| 2 E 3 | 11.1 | 10.8 | 10.2 |

## Results of attainment tests

| Class | EPC2 | NV3 | PV3 |
| :---: | :---: | :---: | :---: |
| $2 B$ | 115.63 | 112.26 | 110.74 |
| $2 D 1$ | 110.03 | 107.64 | 111.23 |
| $2 D 2$ | 102.68 | 100.89 | 103.68 |
| $2 E 1$ | 97.94 | 98.84 | 94.84 |
| 2 EB | 101.52 | 103.16 | 99.74 |
| Total | 104.90 | 103.99 | 103.88 |

Stañdard Deviations for Total Group

| EPC2 | NV3 | PV3 |
| :---: | :---: | :---: |
| 10.75 | 11.11 | 12.59 |

$$
N=157
$$

Attainment scores of two sexes

|  | EPC2 | NV3 | PV3 |
| :--- | :---: | :---: | :---: |
| Boys | 101.3 | 101.4 | 100.1 |
| Girls | 107.5 | 106.1 | 106.6 |

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## Appendix E

Results of the three Viens Lire tests achieved by the three groups. For abbreviations used, see page 214.

Test: VLAI

| Group | 1967 C | 1967 E | 1968 E | 1968 E 2 |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 13.27 | 14.95 | 12.28 | 12.24 |
| SD | 3.59 | 3.67 | 4.35 | 4.26 |
| N | 334 | 59 | 233 | 157 |

Test: VLA2

| Group | 1967 C | 1967 E | 1968 E | 1968 E 2 |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 23.42 | 26.15 | 15.34 | 19.17 |
| SD | 6.02 | 8.79 | 7.83 | 8.58 |
| N | 334 | 59 | 233 | 157 |

Test: VLiA3

| Group | $1967 C$ | 1967 E | 1968 E | 1968 E 2 |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 2.67 | 2.03 | 1.46 | 1.67 |
| SD | 1.19 | 1.41 | 1.17 | 1.18 |
| N | 334 | 59 | 233 | 157 |

Test: VLBI

| Group | $1967 C$ | $1967 E$ | 1968 E |
| :--- | ---: | ---: | ---: |
| Mean | 30.67 | 27.89 | 25.46 |
| SD | 4.92 | 6.65 | 6.83 |
| N | 334 | 62 | 233 |

Test : VLB2

| Group | $1967 C$ | 1967 E | 1968 E |
| :--- | ---: | ---: | ---: |
| Mean | 19.48 | 21.39 | 14.06 |
| SD | 6.54 | 7.66 | 7.98 |
| N | 334 | 62 | 233 |

Test: VLB3

| Group | $1967 C$ | $1967 E$ | $1968 E$ |
| :--- | :---: | :---: | :---: |
| Mean | 6.18 | 6.08 | 4.55 |
| $S D$ | 2.28 | 2.29 | 2.72 |
| $N$ | 334 | 62 | 233 |

Test: VLCl
Only two classes took this test in 1968

| Group | 1967 C | 1967 F | $1968-\mathrm{C}$ | $1968-\mathrm{DI}$ |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 28.34 | 25.81 | 23.21 | 29.72 |
| SD | 4.92 | 5.02 | 5.29 | 5.34 |
| N | 334 | 57 | 33 | 40 |

Test: VLC2
Only two classes took this test in 1.968

| Group | $1967 C$ | 1967 E | $1968-\mathrm{C}$ | $1968-\mathrm{Dl}$ |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 17.75 | 20.14 | 10.88 | 20.05 |
| SD | 4.91 | 7.93 | 6.35 | 5.26 |
| N | 334 | 57 | 33 | 40 |

Test : VLC3
Only two classes took this test in 1968

| Group | 1967 C | 19678 | $1968-\mathrm{C}$ | $1968-\mathrm{DI}$ |
| :--- | ---: | ---: | ---: | ---: |
| Mean | 4.69 | 4.68 | 3.63 | 5.72 |
| SD | 1.92 | 2.05 | 2.37 | 2.24 |
| N | 334 | 57 | 33 | 40 |

Average results of individual classes in the 1968E group on the individual tests VLAl to VLB3, and on all six tests combined.

| Class | VLAI | VLA2 | VLA3 | VLBI | VLB2 | VLB3 | VLA+VLB |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 9.57 | 9.02 | 1.00 | 19.91 | 7.14 | 2.25 | 48.89 |
| A(11+) | $(9.95)$ | $(8.78)$ | $(1.00)$ | $(18.87)$ | $(6.74)$ | $(2.17)$ | $(47.51)$ |
| A(10+) | $(8.83)$ | $(9.50)$ | $(1.00)$ | $(21.92)$ | $(7.92)$ | $(2.42)$ | $(52.49)$ |
| B | 14.57 | 19.05 | 1.94 | 27.26 | 22.78 | 5.63 | 91.23 |
| C | 11.21 | 13.48 | 1.00 | 23.38 | 12.31 | 4.48 | 64.86 |
| D1 | 15.76 | 22.00 | 2.09 | 32.24 | 21.64 | 6.36 | 120.09 |
| D2 | 13.52 | 18.52 | 1.42 | 27.84 | 12.74 | 4.81 | 78.85 |
| E1 | 11.42 | 13.79 | 1.79 | 26.13 | 14.04 | 4.71 | 71.88 |
| E2 | 11.07 | 12.93 | 1.40 | 23.37 | 12.63 | 3.87 | 65.27 |
| E3 | 11.88 | 15.22 | 1.31 | 24.50 | 12.81 | 4.88 | 70.60 |
| Total | 12.28 | 15.34 | 1.46 | 25.46 | 14.06 | 4.55 | 73.15 |

## 1968E(1) group, January - June, 1968

Specially selected sub-group of 1968 E for comparison with 1968E2 (follow-up) group of 5 classes (see below).
This sub-group excludes classes $A$. and $C .$, but includes back in all those children in the other classes who were absent for testing Unit VLB only.

## Average scores on Testing Unit VLA

| Class | VLAI | VLA2 | VLA3 |
| :---: | :---: | :---: | :---: |
| B | 14.57 | 19.05 | 1.94 |
| D1 | 15.97 | 22.22 | 2.22 |
| D2 | 13.45 | 18.21 | 1.33 |
| E1 | 11.31 | 14.10 | 1.76 |
| E2 | 11.07 | 12.93 | 1.40 |
| E3 | 11.62 | 14.74 | 1.29 |
| Total | 12.99 | 16.91 | 1.65 |

Standard deviations for total sub-group

| VLA1 | VLA2 | VLA3 |
| :--- | :--- | :--- |
| 4.31 | 7.83 | 1.23 |

Scores of two sexes

|  | VLA1 | VLA2 | VLA3 |
| :--- | :---: | :---: | :---: |
| Boys | 12.0 | 15.2 | 1.60 |
| Girls | 14.0 | 18.7 | 1.68 |

1968E2_group, September-December, 1968

| Class | VLAI | VLA2 | VLA3 |
| :---: | :---: | :---: | :---: |
| $2 B$ | 14.74 | 27.53 | 2.26 |
| $2 D 1$ | 13.74 | 22.10 | 1.79 |
| $2 D 2$ | 12.73 | 15.11 | 1.73 |
| 281 | 11.74 | 17.54 | 1.39 |
| 283 | 8.77 | 16.80 | 1.35 |
| Total | 12.24 | 19.17 | 1.67 |

## Standard Deviations for total group



Scores of two sexes

|  | VLA1 | VLA2 | VLA3 |
| :--- | :---: | :---: | :---: |
| Boys | 10.9 | 15.7 | 1.26 |
| Girls | 13.1 | 21.2 | 1.91 |

Statistical significance of differences between group means on Testing Units VLA and VLB

1. 1968 First experimental group (8 classes) and 1967 Control Group

| Test | Group with <br> higher mean | Significant <br> at 0.05 level |
| :--- | :---: | :---: |
| VLA1 | $1967 C$ | Yes |
| VLA2 | $1967 C$ | Yes |
| VLA3 | $1967 C$ | Yes |
| VLB1 | $1967 C$ | Yes |
| VLB2 | $1967 C$ | Yes |
| VLB3 | $1967 C$ | Yes |

2. 1968 First experimental group ( 8 classes) and 1967 Experimental Group

| Test | Group with <br> higher mean | Significant <br> at 0.05 level |
| :--- | :---: | :---: |
| VLA1 | $1967 E$ | Yes |
| VLA2 | 1967 E | Yes |
| VLA3 | 1967 E | Yes |
| VLB1 | 1967 E | Yes |
| VLB2 | $1967 E$ | Yes |
| VLB3 | 1967E | Yes |

3. 1968 first experimental group ( 8 classes - reduced to 6) and 1968 second experimental group ( 5 classes)

| Test | Group with <br> higher mean | Significant <br> at 0.05 level |
| :--- | :--- | :--- |
| VLAI | $1968 \mathrm{E}(1)$ | No |
| VLA2 | 1968 E 2 | Yes |
| VLA3 | 1968 E 2 | No |

4. 1968 second experimental group ( 5 classes)
and 1967 control group

| Test | Group with <br> higher mean | Significant <br> at 0.05 level |
| :---: | :---: | :---: |
| VLAI | $1967 C$ | Yes |
| VLA2 | $1967 C$ | Yes |
| VLA3 | $1967 C$ | Yes |

5. 1968 second experimental group and 1967 experimental group

| Test | Group with <br> higher mean | Significant <br> at 0.05 level |
| :---: | :---: | :---: |
| VLAI | 1967 E | Yes |
| VLA2 | $1967 E$ | Yes |
| VLA3 | 1967E | No |

Comparison of "Grammar School Potential" children in 1968E, and Total 1967C Group

1. "Grammar School Potential" = top $20 \%$

| Test | 1968 E | 1967 C | Significant <br> at 0.05 level |
| :---: | :---: | :---: | :---: |
| VLA1 | 14.6 | 13.3 | Yes |
| VLA2 | 21.5 | 23.4 | No |
| VLA3 | 2.1 | 2.7 | Yes |
| VLB1 | 30.9 | 30.7 | No |
| VLB $_{2}$ | 20.5 | 19.4 | No |
| VLB3 | 6.4 | 6.2 | No |

2. "Grammar School Potential" $\equiv$ top $25 \%$

| Test | 1968E | 1967 C | Significant <br> at 0.05 level |
| :---: | :---: | :---: | :---: |
| VLAI | 14.6 | 13.3 | Yes |
| VLA2 | 21.4 | 23.4 | Yes |
| VLA3 | 2.1 | 2.7 | Yes |
| VLB1 | 30.2 | 30.7 | No |
| VLB2 | 20.1 | 19.4 | No |
| VLB3 | 6.3 | 6.2 | No |

1968 (Main) group. Comparison of averages
achieved by boys and girls (excluding
all-girl class B) on tests VLA and VLB

| Test | Boys | Girls |
| :---: | :---: | :---: |
| VLAI | 11.8 | 12.4 |
| VLAA | 14.1 | 15.9 |
| VLA3 | 1.5 | 1.4 |
| VLBI | 25.4 | 25.1 |
| VLBS | 12.6 | 14.0 |
| VLB3 | 4.3 | 4.5 |

1967 experimental group. Averages achieved
by the two classes within this group

| Test | Class 1 | Class 2 |
| :---: | ---: | ---: |
| VLAI | 16.03 | 13.96 |
| VLA2 | 29.43 | 23.20 |
| VLA3 | 2.87 | 1.45 |
| VLB1 | 31.24 | 24.94 |
| VLB2 | 26.31 | 17.06 |
| VLB3 | 7.34 | 5.03 |
| VLC1 | 27.42 | 24.24 |
| VLC2 | 24.60 | 15.82 |
| VLC3 | 5.50 | 3.89 |

Appendix FCorrelation matrices showing the intercorrelation ofthe three attainment tests and the Viens Lire tests.

1. 1968E - Main experimental group.
2. 1968E2 - second batch.
3. 1967 C - Grammar school control group.

## 1. Correlations in the results of first 1968 experimental group

(a) Between the Attainment Tests

|  | EPC2 | NV3 |
| :--- | :--- | :--- |
| NV3 | 0.64 | - |
| PV3 | 0.82 | 0.77 |

(b) Between the Viens Lire Tests

|  | VLAI | VLA2 | VLA3 | VLBl | VLB2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | VLA2 | 0.62 | - | - | - |
| VLA3 | 0.44 | 0.55 | - | - | - |
| VLBI | 0.59 | 0.75 | 0.53 | - | - |
| VLB2 | 0.61 | 0.80 | 0.57 | 0.75 | - |
| VLB3 | 0.61 | 0.73 | 0.58 | 0.70 | 0.71 |

(c) Between the Attainment Tests and the Viens Lire Tests

|  | $\mathrm{HPC2}$ | NV 3 | PV 3 |
| :--- | :--- | :--- | :--- |
|  | $\mathrm{VLA1}$ | 0.52 | 0.46 |
| $\mathrm{VLA2}$ | 0.66 | 0.50 |  |
| VLA 3 | 0.43 | 0.39 | 0.44 |
| $\mathrm{VLB1}$ | 0.59 | 0.53 | 0.59 |
| $\mathrm{VLB2}$ | 0.67 | 0.52 | 0.65 |
| $\mathrm{VLB3}$ | 0.58 | 0.49 | 0.57 |

2. Correlations in the results of the second 1968 experimental group
(a) Between the Attainment Tests

(b) Between the Viens Lire Tests

(c) Between the Attainment Tests and the Viens Lire Tests

|  | EPC2 | NV3 | PV3 |
| :--- | :--- | :--- | :--- |
|  | VLA1 | 0.40 | 0.23 |
| VLA2 | 0.68 | 0.38 |  |
| VLA3 | 0.45 | 0.32 | 0.63 |

## 3. Correlations between the results of the 1967 Control group

|  | VLA1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | VLA2 | .22 | - | - | - | - | - | - |
| VLA3 | .23 | .51 | - | - | - | - | - | - |
| VLB1 | .25 | .54 | .45 | - | - | - | - | - |
| VLB2 | .17 | .77 | .55 | .52 | - | - | - | - |
| VLB3 | .32 | .59 | .55 | .52 | .58 | - | - | - |
| VLC1 | .20 | .46 | .39 | .43 | .48 | .49 |  |  |
| VLC2 | .18 | .74 | .51 | .54 | .75 | .58 | .53 | - |
| VLC3 | .23 | .49 | .48 | .47 | .51 | .51 | .38 | .48 |

## Appendix G

1. Summary of chi-squared analysis of the performance of the three groups 1967C, 1967E and 1968E on the 154 individual test items in Test Units VLA and VLB.
2. Comparison of 1967C and 1967E.
3. Comparison of 1967E and 1968E.
4. Comparison of 1967 C and 1968E.

1967C = Control Group of Grammar School Classes tested in 1967.
1967E $=$ Experimental Group of two Primary Classes, 1967.
1968E = First group of 8 Primary Classes, 1968.
2. Table showing percentage of each group answering each test item correctly.

Each table shows the number of test items for which each group had a significantly higher number of correct answers than the other.

$$
\text { 1. } 1967 C \text { and } 1967 E
$$

| Test | 1967C has <br> more correct | No significant <br> difference | 1967E has <br> more oorrect | Total |
| :--- | :---: | :---: | :---: | :---: |
| VLA | 11 | 35 | 20 | 66 |
| VLB | 25 | 49 | 14 | 88 |
| Total | 36 | 84 | 34 | 154 |

2. 1967E and 1968E

| Test | 1967E has <br> more correct | No significant <br> difference | 1968E has <br> more correct | Total |
| :--- | :---: | :---: | :---: | :---: |
| VLA | 43 | 22 | 1 | 66 |
| VLB | 35 | 53 | 0 | 88 |
| Total | 78 | 75 | 1 | 154 |

3. 1967 C and 1968E

| Test | 1967C has <br> more correct | No significant <br> difference | 1968E has <br> more correct | Total |
| :--- | :---: | :---: | :---: | :---: |
| VLA | 44 | 19 | 3 | 66 |
| VLB | $61:$ | 22 | 5 | 88 |
| Total | 105 | 41 | 8 | 154 |

The lists show the order of difficulty of test items for the three main groups. The difficulty is indicated by the percentage of pupils answering the item correctly. The easiest items appear first.

| \% correct | 1968E |  | 19676 |  | 1967E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 99 |  |  | bonjour | VLA2 |  |  |
| 98 |  |  | mois | VLBI | court | VLA2 |
| 97 | chat | VLBI | jas | VLBI |  |  |
| 96 | mois | VLBI | douze | VLA2 | mais | VLBI |
| 96 |  |  | chat | VLBI | mois | VLBl |
| 96 |  |  |  |  | jupe | VLB2 |
| 95 | jas | vLBI |  |  | rouge | VLA2 |
| 95 |  |  |  |  | gaie | VLB2 |
| 94 |  |  | c'est | VLA2 | cho-- | VLA2 |
| 94 |  |  | noix | VLBI | bonjour | VLA2 |
| 94 |  |  | chai | VLAI |  |  |
| 93 |  |  | mais | VLBI | mais | VLA2 |
| 93 |  |  | 1 l | VLBl | chat | VLBI |
| 93 |  |  | aussi- |  |  |  |
|  |  |  | oh si | VLB3 |  |  |
| 92 |  |  | mais | VLAI |  |  |
| 92 |  |  | fait | VLA2 |  |  |
| 92 |  |  | mais | VLA2 |  |  |
| 92 |  |  | joue | VLBI |  |  |
| 92 |  |  | ça | VLBI |  |  |
| 91 | joue | VLBI | mat | vial | si | VLAI |
| 91 |  |  | mais | VLA2 | sais | VLAl |
| 91 |  |  |  |  | joue | VLBI |
| 91 |  |  |  |  | jas | VLBl |
| 91 |  |  |  |  | chai | VLBI |
| 91 |  |  |  |  | sais- |  |
|  |  |  |  |  | c'est | VLB3 |
| 90 |  |  | nos | VLBI | fou | VLB1 |
| 90 |  |  | cas | VLBI |  |  |
| 89 | bonjour | VLA2 |  |  |  |  |
| 89 | mais | VLBI |  |  |  |  |
| 88 | c'est | VLA2 | nus | VLBl | cas | VLBI |
| 88 |  |  | nous | VLBI |  |  |
| 87 |  |  | -ocolat | VLA2 | ça | VLBI |
| 87 |  |  | trouve | VLA2 | buffet | VLB2 |
| 87 |  |  | choix | VLBI | aussi- <br> oh si | VLB3 |
| 87 |  |  | trouve | vLB2 |  |  |
| 86 | chai | VLBI | loi | VLBI | fait | VLAI |
| 86 |  |  | rouge | VLB2 | rouges | VLA2 |
| 86 |  |  | court | VLB2 |  |  |
| 85 |  |  | mou | VLAI | sous | VLBI |
| 85 |  |  | sous | vLBI | 14 | VLBl |



| \% correct | 1968E |  | 1967 C |  | 1967E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73 |  |  | blanche | VLB2 |  |  |
| 72 | mou | VLAI | si | VLAI | four | VLal |
| 72 |  |  | sais | VLAI | --erche | VLat |
| 72 |  |  | cher-- | VLA2 | neuf | VLA2 |
| 72 |  |  |  |  | bateau | VLA2 |
| 72 |  |  |  |  | fut | VLBI |
| 72 |  |  |  |  | blanche | VLB2 |
| 72 |  |  |  |  | tél--- | VLB2 |
| 71 | fait | VLA2 | four | VLAI | pair | VLAI |
| 71 |  |  |  |  | gâteaux | VLA2 |
| 71 |  |  |  |  | bleue | VLA2 |
| 71 |  |  |  |  | tousse | VLA2 |
| 70 | fou | VLAI | j'ai | VLA2 | -léphone | VLB2 |
| 70 | feu | VLBI | mais- |  | tres- |  |
|  |  |  | met | VLA3 | trait | VLB3 |
| 70 | loi | VLBI |  |  |  |  |
| 69 | jeune | VLB2 | pou | VLBI | feu | VLAl |
| 69 | court | VLB2 |  |  | dix | VLBl |
| 69 |  |  |  |  | cadeau | VLB2 |
| 68 | si | VLAl | fou | VLAI |  |  |
| 68 | paix | VLal | pair | VLAI |  |  |
| 68 | peur | VLAl |  |  |  |  |
| 68 | chou | VLBI |  |  |  |  |
| 67 | four | VLAl | peur | VLAI | deux | VLA2 |
| 67 | mais | VLA2 |  |  | chouette | VLA2 |
| 67 | sais- |  |  |  |  |  |
|  | c'est | VLB3 |  |  | nos | VLBl |
| 66 | sais | VLAI |  |  | --ocolat | VLA2 |
| 66 | né | VLBI |  |  | choix | VLBI |
| 66 |  |  |  |  | garçon | VLB2 |
| 66 |  |  |  |  | cinéma | VLB2 |
| 65 | poupée |  |  | VLBI |  |  |
| 64 | pou | VLBI | poux | VLAI | fleurs | VLA2 |
| 64 | ni | VLB1 |  |  | nus | VLB1 |
| 64 |  | VLBl |  |  | saut- <br> seau | VLB3 |
| 64 | dix | VLBI |  |  |  |  |
| 64 | jupe | VLB2 |  |  |  |  |
| 63 | pour | VLA2 | paix | VLAl |  |  |
| 63 |  | VLB1 |  |  |  |  |
| 63 | 1'eauallô | VLB3 |  |  |  |  |
| 62 | vrai | VLA2 | vrai | VLA2 | prfsseur | VLA2 |
| 62 | nos | VLBI |  |  | nous | VLBl |
| 62 | faux | VLBI |  |  |  | VLBI |
| 62 | pau | VLBI |  |  | jade | VLB2 |
| 62 | choix | VLBI |  |  |  |  |


| \% correct | 1968E |  | $1967 C$ |  | 19676 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 61 \\ & 61 \end{aligned}$ | pair <br> pour | VLAI <br> VLAI | $\begin{array}{ll} \text { sous } & \text { VLA2 } \\ \text { souche } & \text { VLA2 } \end{array}$ |  | peu <br> mais- <br> met <br> énorme <br> trouve | VuAl |
|  |  |  |  |  | vLa3 |
|  |  |  | bout | VLA2 |  | VLB2 |
| 61 |  |  | jade | VLB2 |  | VLB2 |
|  |  |  | l'abbé | VLB3 |  |  |  |
| 60 |  |  | seau. | VLAI |  |  |
| 60 |  |  | feu | VLAl |  |  |
| 60 |  |  | mis | VLBI |  |  |
| 6060 |  |  | jupe | VLB2 |  |  |
|  |  |  | vaud- |  |  |  |
| 59 |  |  | veau | vLB3 |  |  |
|  | feu | VLAI | sous | VLAl | vais | VLA2 |
| 59 | nus | VLBI | prfsseur | VLat2 |  | VLB2 |
| 59 | fut | VLBI |  |  | chapeaux | VLB2 |
| 58 | meaux | VLAI | chouette | VLA2 | pu | VLBI |
| 58 | voila | vLB2 |  |  | de | VLBI |
| 58 | aussi | VLB2 |  |  | neuf | VLB2 |
| 57 |  |  | de | VLBl |  |  |
| 57 |  |  | I' eau |  |  |  |
| 56 |  |  | allô | VLB3 |  |  |
|  |  |  | voul- | VLB2 |  |  |
| 56 |  |  | pleurer | VLB2 |  |  |
| 56 |  |  | sautseau | VLB3 |  |  |
| 55 | chapeaux | vLB2 | me | VLBI | poux | VLAI |
| 55 |  |  | leurs | VLB2 | souche | VLA2 |
| 55 |  |  |  |  | les- | vLA3 |
| 54 | 1 l | VLBI | gargon | VLB2 | chuinte | VLA2 |
| 54 | blanche | VLB2 |  |  | pau | VLB1 |
| 52 | sous | VLAl |  |  | peu | VLAI |
| 51 | j'ai | VLA2 | le | VLBl | leur | VLBI |
| 51 | leur | VLBI | croix | VLB2 | rené | VLB2 |
| 51 |  |  |  |  | écoute | VLB2 |
| 51 |  |  |  |  | mot- | VLB3 |
| 50 | vais | VLA2 | gargon | VLA2 | $\begin{aligned} & \text { jet- } \\ & \text { j'ai } \end{aligned}$ | VLB3 |
| 50 | douze | VLA2 | leur | VLBI |  |  |
| 50 | pu | VLBI |  |  |  |  |
| 49 | poux | VLAI | neuf | VLA2 |  |  |
| 49 | nous | VLB1 | motmeaux | vLB3 |  |  |
| 49 | saut |  |  |  |  |  |
|  | seau | VLB3 |  |  |  |  |
| 48 | cher-- | VLA2 | pour | VLAl | facteur | VLB2 |
| 48 | trouve | VLA2 | pu | VLBl |  |  |


| \% correct | 19688 |  | 19676 |  | 1967E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 | seau | VLAl |  |  | garcon | VLA2 |
| 47 | chouette | VLA2 |  |  | sous | VLA2 |
| 46 | trouve | VLB2 |  |  | le | VLBI |
| 45 |  |  | --erche | VLA2 | peaux | VLAl |
| 45 |  |  |  |  | creux | VLA2 |
| 45 |  |  |  |  | ascnseur | VLA2 |
| 45 |  |  |  |  | ca-sa | VLA3 |
| 45 |  |  |  |  | mouchoir | VLB2 |
| 44 | peu | VLAl | beau | VLA2 |  |  |
| 44 | jade | VLB2 | nu | VLBI |  |  |
| 43 | peu | VLAI | peaux | VLAl |  | VLBI |
| 43 | les- |  | gâteaux | vLA2 | vaud- |  |
|  | lait | VLA3 |  |  | veau | VLB3 |
| 43 | ca-sa VLA3 |  | facteur | VLB2 |  |  |
| 43 | chou: VLBl |  |  |  |  |  |
| 42 |  |  |  |  |  |  |
| 42 | chaux VLBI |  |  |  |  |  |
| 41 | deux VLA2 |  |  |  | vieux | VLB2 |
| 41 | trèstrait | vLB3 |  |  | croix | VLB2 |
| 41 |  |  |  |  | voul- | VLB2 |
| 41 |  |  | bateau VLA2 |  | pleurer | VLB2 |
| 40 |  |  |  |  |  |  |
| 40 |  |  | poupée | VLA2 |  |  |
| 40 |  |  | point- | VLB2 |  |  |
| 39 |  |  | feu | VLA2 |  |  |
| 39 |  |  | ne | VLBI |  |  |
| 39 |  |  | vieux | VLB2 |  |  |
| 39 |  |  | jules | VLB2 |  |  |
| 39 |  |  | potpau | VLB3 |  |  |
| 38 | mais- |  | $\begin{aligned} & \text { jet- } \\ & \text { j'ai } \end{aligned}$ | VLB3 | chapeau | VLA2 |
|  | met neuf | $\begin{aligned} & \text { VLA3 } \\ & \text { VLB2 } \end{aligned}$ |  |  |  |  |
| 38 |  |  | $j^{\prime} a i$ |  | voygeurs | VLA2 |
| 38 |  |  |  |  | bout | VLA2 |
| 38 |  |  |  |  | mis | VLBI |
| 38 |  |  |  |  | chaux | VLBI |
| 38 |  |  |  |  | chou | VLB1 |
| 38 |  |  |  |  | chin-- | VLB2 |
| 38 |  |  |  |  | 1'abbé | VLB3 |
| 37 | de | VLBI | peu | VLAI | pot- |  |
|  |  |  |  |  | pau | VLB3 |
| 37 | voul- | VLB2 | chapeau | VLA2 |  |  |
| 37 | mot- |  |  |  |  |  |
|  | meaux | VLB3 |  |  |  |  |
| 36 | neuf | VLA2 | peu |  |  |  |
| 36 | peu | VLBI | chin-- | VLB2 |  |  |
| 36 | gargon | VLB2 |  |  |  |  |


| \% correct | 1968\% |  | 1967 C |  | 1967E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 | vaudveau | VLB3 | cadeaux | VLA2 | balai | VLA2 |
| 35 |  |  | p--ntus | VLB2 | feu | VLA2 |
| 35 |  |  |  |  | nu | VLBI |
| 34 | peaux | VLAl |  |  |  |  |
| 33 | souche | VLA2 | ascnseur | VLA2 | me | VLBI |
| 33 | nu | VLBI | cadeau | VLB2 | ne | VLBI |
| 33 | au | VLB2 |  |  |  |  |
| 33 | cadeau | VLB2 |  |  |  |  |
| 32 | croix | VLB2 | cinéma | VLB2 |  |  |
| 31 | mis | vLBl | rené | VLB2 |  |  |
| 31 | -léphone | VLB2 |  |  |  |  |
| 31 | l'abbé- <br> la baie | VLB3 |  |  |  |  |
| 30 | tél--- | VLB2 | creux | VLA2 |  |  |
| 30 | ois--- | VLB2 |  |  |  |  |
| 30 | gaie | VLB2 |  |  |  |  |
| 30 | jet- | VLB3 |  |  |  |  |
| 29 | -erche | VLA2 | voygeurs | VLA2 | ois--- | VLB2 |
| 29 |  |  | peu | VLBI |  |  |
| 29 |  |  | mouchoir | VLB2 |  |  |
| 28 | tousse | VLA2 | gaie | VLB2 | feutre | VLA2 |
| 28 | bout | VLA2 |  |  |  |  |
| 28 | mouchoir | VLB2 |  |  |  |  |
| 28 | pot- |  |  |  |  |  |
|  | pau | VLB3 |  |  |  |  |
| 27 | ne | VLBI | sotseau |  | Ieurs | VLB2 |
| 27 |  |  | seau | $\begin{aligned} & \text { VLA3 } \\ & \text { VLB2 } \end{aligned}$ |  |  |
| 26 | gateaux | VLA2 |  |  |  |  |
| 26 | me | VLBI' |  |  |  |  |
| 25. |  |  | chuinte | VLA2 | --seaux | VLB2 |
| 24 | bleue | VLA2 | bleue | VLA2 | point-- | VLB2 |
| 24 | chuinte | VLA2 |  |  |  |  |
| 24 | énorme | VLB2 |  |  |  |  |
| 23 | écoute | VLB2 |  |  |  |  |
| 22 | cadeaux | vLA2 |  |  | doucemnt | VLa2 |
| 22 |  |  |  |  | sot- <br> seau | VLA3 |
| 21 | rené | VLB2 |  |  |  |  |
| 21 | --seaux | VLB2 |  |  |  |  |
| 21 | jules | VLB2 |  |  |  |  |
| 20 | facteur | VLB2 | --seaux | VLB2 |  |  |
| 20 | pleurer | VLB2 |  |  |  |  |
| 19 | sous | VLA2 | feutre | VLA2 |  |  |
| 19 |  |  | ois--- | VLB2 |  |  |
| 18 | garcon | VLA2 | tél--- | VLB2 |  |  |
| 18 | bateau | VLA2 | v--1u | VLB2 |  |  |


| \% correct | 1968E | 19676 |  | 1967E |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | chin-- VLB2 |  |  |  |  |
| 17 | p--ntus VLB2 | énorme | VLB2 | --inois | VLB2 |
| 16 | point-- VLB2 | --léphne | vLB2 | rameau | VLA2 |
| 16 |  |  |  | peau- |  |
| 16 |  |  |  | pot | VLA3 VLB2 |
| 15 | chapeau VLA2 |  |  |  |  |
| 14 | sot- | peau- |  | p--ntus | VLB2 |
|  | seau VLA3 | pot | vLA3 |  |  |
| 14 | cinéma VLB2 |  |  |  |  |
| 14 | leurs VLB2 |  |  |  |  |
| 13 | creux VLA2 | --inois | VLB2 |  |  |
| 12 | vieux VLB2 |  |  |  |  |
| 11 | balai VLA2 | doucemnt | VLA2 |  |  |
| 11 | fou VLA2 |  |  |  |  |
| 10 | beau VLA2 |  |  |  |  |
| 9 | feutre VLA2 |  |  |  |  |
| 9 | ascnseur VLA2 |  |  |  |  |
| 9 | v--1u VLB2 |  |  |  |  |
| 8 | prfsseur VLA2 |  |  |  |  |
| 8 | --inois VLB2 |  |  |  |  |
| 7 | doucemnt VLA2 |  |  |  |  |
| 6 |  | balai rameau | VLA2 <br> VLA2 | v--lu | VLB2 |
| 5 | rameau VLA2 |  |  |  |  |
| 5 | voygeurs VLA2 |  |  |  |  |
| 5 | peau- <br> pot VLA3 |  |  |  |  |

## Appendix H.

1. Cut-off table showing the proportions of the 1968 8-class experimental group who achieved scores above and below certain critical points on the 1967 Grammar School control distribution.
2. Graphs of score distribution for the six tests VLAl - VLB3 for the two groups 1968E and 1967C.

Percentage of 1968E scoring withint 1967 C distribution limits for each test.


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Distribution of scores on Test VLB 3

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## Appendix I.

Comparison of scores on the known and unknown test items by the 1968 group of 8 primary classes.

Correlations of children's scores on known and unknown items.

| Test | $r$ |
| :---: | :---: |
| VLA1 | .65 |
| VLA2 | .73 |
| VLA3 | .27 |
| VLB1 | .63 |
| VLB2 | .72 |
| VLB3 | .53 |
| VLA $\quad \mathrm{VLB}$ | .88 |

Average percentage scores of whole 1968E group on the two types of item.

| Test | Known | Unknown |
| :---: | :---: | :---: |
| VLA1 | 71.0 | 58.1 |
| VLA2 | 55.2 | 24.0 |
| VLA3 | 40.6 | 20.9 |
| VLB1 | 64.7 | 63.6 |
| VLB2 | 40.6 | 31.0 |
| VLB3 | 55.8 | $36.2:$ |
| VLA + VLB | 51.8 | 44.8 |

Average percentage scores on the known
items achieved by 1968E and 1967 C .

| Test | 1968 E | 1967 C |
| :---: | :---: | :---: |
| VLAI | 71.0 | 71.6 |
| VLA2 | 55.2 | 69.7 |
| VLA3 | 40.6 | 75.2 |
| VLB1 | 64.7 | 76.1 |
| VLB2 | 40.6 | 49.7 |
| VLB3 | 55.8 | 72.0 |
| VLA + VLB | 51.8 | 63.0 |

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Appendix J.

A comparison of A-stream standard children in a streamed set with A-stream standard children in an unstreamed set. 1968 main group of 8 classes.

Figures obtained for a comparison of the A-stream class Dl and A-stream standard children in school E.

## Means

|  | VLA1 | VLA2 | VLA3 | EPCC2 | NV3 | PV3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D1 | 16.06 | 22.15 | 2.27 | 109.69 | 111.63 | 113.12 |
| E | 13.24 | 19.24 | 1.90 | 110.30 | 111.84 | 111.21 |

## Standard Deviations

|  | VLAI | VLA2 | VLA3 | EPC2 | NV3 | PV3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| D1 | 2.97 | 6.22 | 1.28 | 7.79 | 8.08 | 8.04 |
| $E$ | 3.52 | 6.17 | 1.21 | 7.44 | 8.16 | 8.50 |

$\mathrm{N}=33$ for each group.

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## Appendix K.

Evidence of interference from English spelling conventions found in Tests VLA and VLB, 1968 main group of 8 classes.

## Appendix K.

Evidence of interference from English spelling conventions in Tests VLAl, VLA2, VLBl, VLB2.

French grapheme : /eu/ Phoneme : $[\infty],[\phi]$.

Exact representation in English : none.

## Approximations:-

$\begin{array}{ll}\text { 1. } / \mathrm{er} / & \text { Sound : [0: }] \\ \text { 2. } / \mathrm{u} / & \text { Sound : }\lceil u\rceil\end{array}$


Evidence of interference from English in Tests VLA2 and VLB2.

## 1. Test VLA?

| Grapheme | Sound of Phoneme | Sound represented by | Number of occurrences |
| :---: | :---: | :---: | :---: |
| /c/ | [5] | S | 17 |
|  |  | SET | 2 |
| /9/ | [5] | S | 49 |
| $/ \mathrm{ch} /$ | [s] | - SH | 99 |
| lou/ | [u] | U | 334 |
|  |  | 00 | 55 |
| /ai/ | $[\mathrm{e}][\mathrm{e}]$ | E | 135 |
|  |  | A | 112 |
|  |  | AY | 9 |
| /eu/ | [ee] [¢] | $E$ (before r) | 419 |
|  |  | U (not q.5) | 123 |
|  |  | ER | 102 |
|  |  | UR | 96 |
| /eau/ | $[0]$ | 0 | 138 |
|  |  | OW | 10 |
|  |  | OA | 9 |

## 2. Test VLB2

| Grapheme | Sound of Phoneme | Sound represented by | Number of occurrences |
| :---: | :---: | :---: | :---: |
| /9/ | [5] | $s$ | 39 |
| /ch/ | [5] | SH | 27 |
| /oi/ | [wa] | WA | 22 |
|  |  | UA | 18 |
|  |  | W | 17 |
| $16 /$ | [e] | E | 729 (?) |
|  |  | A | 193 |
| /ou/ | [u] | U | 108 |
|  |  | 00 | 6 |
| 14 | [y] | - | - |
| /au/ | [0] | 0 | 46 |
|  |  | OH | 6 |
|  |  | OA | 4 |
| /eul | [o] [9] | $\begin{gathered} E(\text { beföre } r) \\ U \end{gathered}$ | $\begin{aligned} & 172 \\ & 122 \end{aligned}$ |
|  |  | ER | 23 |
|  |  | UR | 21 |
|  |  | OR | 5 |
| /eau/ | [0] | 0 | 15 |
| /ai/ | [e] [E] | A | 82 |
|  |  | E | 10 |

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## Appendix L.

Analysis of mistakes made in the representation and interpretation of graphemes in Testing Units VLA and VLB by the main 1968 Experimental Group of 8 clesses.

1. Gommon confusion of graphemes on Tests VLAl, VLBl.

| Word pronounced <br> contained grapheme | Mord marked by pupil <br> contained grapheme | Frequency |
| :---: | :---: | :---: |
| /au/ | /ou/ | 70 |
| /eau/ | /ou/ | 74 |
| /eu/ | /ou/ | 51 |
| /oi/ | /ou/ | 14 |
| /ou/ | /eau/ | 64 |
| /eu/ | /eau/ | 35 |
| /u/ | /eu/ | 55 |
| /ou/ | /eu/ | 82 |
| /ai/ | /eu/ | 25 |
| /ou/ | /au/ | 12 |
| /eu/ |  | 10 |

2. Written representation of graphemes
(a) Test VLA2

| Grapheme | Written attempt | Frequency | Number of questions |
| :---: | :---: | :---: | :---: |
| /c/ | C | 471 | 2 |
|  | Others | 77 |  |
|  | No offer | 24 |  |
| /9/ | C | 144 | 1 |
|  | G | 59 |  |
|  | S | 49 |  |
|  | Others | 19 |  |
|  | No offer | 15 |  |
| /ch/ | CH | 765 | 6 |
|  | S | 202 |  |
|  | C | 176 |  |
|  | SH | 99 |  |
|  | Others | 304 |  |
|  | No offer | 170 |  |
| /ou/ | OU | 1386 | 10 |
|  | U | 334 |  |
|  | E | 158 |  |
|  | 0 | 113 |  |
|  | Others | 693 |  |
|  | No offer | 173 |  |

## 2. Written representation of graphemes (cont.)

(a) Test VLA?

| Grapheme | Written attempt | Frequency | Number of questions |
| :---: | :---: | :---: | :---: |
| /ai/ | AI | 911 | 6 |
|  | E | 135 |  |
|  | A | 111 |  |
|  | Others | 482 |  |
|  | No offer | 77 |  |
| /ou/ | EU | 570 | 10 |
|  | E | 503 |  |
|  | U | 269 |  |
|  | OU | 181 |  |
|  | EA | 131 |  |
|  | UE | 117 |  |
|  | ER | 102 |  |
|  | UR | 96 |  |
|  | Others | 667 |  |
|  | No offer | 224 |  |
| /eau/ | 00 | 298 | 6 |
|  | EAU | 288 |  |
|  | 0 | 138 |  |
|  | AU | 127 |  |
|  | EU | 120 |  |
|  | Others <br> No offer | $\begin{aligned} & 623 \\ & 122 \end{aligned}$ |  |

(b) Test VLB2

| Grapheme | Written attempt | Prequency | Number of questions |
| :---: | :---: | :---: | :---: |
| /j/ | J | 502 | 3 |
|  | Others | 263 |  |
|  | No offer | 66 |  |
| $/ 9 /$ | ¢ | 103 | 1 |
|  | C | 91 |  |
|  | S | 39 |  |
|  | c | 10 |  |
|  | Others | 32 |  |
|  | No offer | 2 |  |
| /ch/ | CH | 358 | 3 |
|  | c | 61 |  |
|  | S | 37 |  |
|  | J | 32 |  |
|  | Others | 285 |  |
|  | No offer | 58 |  |
| /oi/ | OI | 491 | 6 |
|  | OU | 247 |  |
|  | A | 106 |  |
|  | Others | 663 |  |
|  | No offer | 155 |  |

Written representation of graphemes (cont.)
(b) Test VLB2

| Grapheme | Written attempt | Frequency | Number of questions |
| :---: | :---: | :---: | :---: |
| /é/ | E | 729 | 6 |
|  | E | 412 |  |
|  | A | 193 |  |
|  | I | 91 |  |
|  | E | 62 |  |
|  | Others | 136 |  |
|  | No offer | 39 |  |
| /ou/ | OU | 640 | 4 |
|  | U | 108 |  |
|  | Others | 322 |  |
|  | No offer | 38 |  |
| $10 /$ | U | 550 | 4 |
|  | E | 184 |  |
|  | Others | 205 |  |
|  | No offer | 169 |  |
| /au/ | AU | 257 | 2 |
|  | OU | 68 |  |
|  | 0 | 46 |  |
|  | Others | 167 |  |
|  | No offer | 16 |  |

Written representation of graphemes (cont.)
(b) Test VLB2

| Grapheme | Written attempt | Frequency | Number of questions |
| :---: | :---: | :---: | :---: |
| /eu/ | EU | 300 | 5 |
|  | E | 207 |  |
|  | OU | 149 |  |
|  | U | 122 |  |
|  | A | 120 |  |
|  | 0 | 90 |  |
|  | Others | 345 |  |
|  | No offer | 52 |  |
| /eau/ | EAU | 154 | 2 |
|  | OU | 91 |  |
|  | AU | 48 |  |
|  | EU | 27 |  |
|  | Others | 206 |  |
|  | No offer | 28 |  |
| /ai/ | AI | 86 |  |
|  | A | 82 |  |
|  | AU | 14 |  |
|  | E | 10 |  |
|  | U | 10 |  |
|  | Others | 61 |  |
|  | No offer | 14 |  |

* may be interference from English


## 3. Phonetic problems

(i) Consonants

|  | VLA2 | VLB2 |
| :---: | :---: | :---: |
| S for C, G | 66 | 39 |
| C', ${ }^{\text {c for }} \mathrm{CH}$ | 177 | 61 |
| CH for C | 5 | - |
| S for CH | 202 | 37 |
| ¢ for CH | 3 | 1 |
| J for CH | 29 | 32 |
| T for CH | 21 | 0 |
| CH for J | - | 22 |
| C for J | - | 9 |
| $S$ for $J$ | - | 16 |
| $G$ for J | - | 35 |
| G for CH | 5 | 27 |

(ii) Vowels

|  | VLA2 | VLB2 |
| :---: | :---: | :---: |
| U for OU) | 334 | 108 |
| OU for U | - | 28 |
| I for $U$ | - | 30 |
| I for ${ }^{\text {E }}$ | - | 91 |
| $0 \text { for AU }$ | - | 46 |
| AU for faU) | (127) | 48 |
| 0 for EAU) | 138 | 15 |
| EAU for AU | - | 1 |
| Efor AI | 1 | 0 |

4. Grapheme shape problems
(i) Inversion of letters

|  | VLA2 | VLB2 |
| :--- | :---: | :---: |
| IA for AI | 58 | 4 |
| UE for EU | 117 | 57 |
| UO for OU | 18 | 6 |
| IO for OI | - | 56 |
| AEU for EAU | 11 | 6 |
| AUE for EAU | 6 | 0 |
| EUA for EAU | 4 | 0 |
| UEA for EAU | 3 | 0 |

(ii) Substitution of one letter without inversion
(a) Grapheme produced by substitution exists in French

|  | VLA2 | VLB2 |
| :--- | :---: | :---: |
| OU for EU | 181 | 149 |
| EU for OU | 75 | 16 |
| AU for OU | $(27)$ | 19 |
| AU for AI | $(36)$ | 14 |
| AU for EU | $(30)$ | 23 |
| OI for OU | $(13)$ | 35 |
| OI for AI | $(5)$, | 2 |
| OU for AU | - | 68 |
| OI for EU | $(4)$ | 23 |
| EU for OI | - | 19 |
| AI for OI | - | 43 |
| OU for OI | - | 247 |

(b) Grapheme produced by substitution either does not exist in French or is probably not well known to experimental group.

|  | VLA2 | VLB2 |
| :--- | :---: | :---: |
| EA for EU | 131 | 33 |
| AE for AI | 15 | 0 |
| EI for AI | 17 | 2 |
| EI for EU | 18 | 7 |
| OE for OU | 10 | 2 |
| OA for OU | 8 | 3 |
| UI for OI | - | 6 |
| EO for EU | 6 | 4 |
| EOU for EAU | 0 | 1 |

(iii) Substitution of one or more letters with inversion

|  | VLA2 | VLB2 |
| :--- | ---: | ---: |
| UE for OU | 88 | 20 |
| UA for OU | 14 | 4 |
| AE for EU | 10 | 4 |
| UI for OU | 8 | 7 |
| UI for EU | 9 | 6 |
| UA for EU | 9 | 10 |
| IA for OI | - | 5 |
| UE for OU | - | 1 |
| OUE for EAU | 2 | 6 |

(iv) All letters different

|  | VLA2 | VLB2 |
| :--- | :---: | :---: |
| OA for EU | 5 | 0 |
| UE for OI | - | 12 |
| EA for OU | 12 | 12 |
| EA for OI | - | 13 |
| AE for OI | - | 9 |

(v) Addition or subtraction of letters

|  | VLA2 | VLB2 |
| :---: | :---: | :---: |
| AU for EAU | 127 | $(48)$ |
| EU for EAU | 120 | 27 |
| EAU for EU | 40 | 6 |
| EA for EAU | 89 | 10 |
| UE for EAU | 21 | 9 |
| UA for EAU | 18 | 1 |
| AE for EAU | 9 | 4 |
| U for EAU | 47 | 1 |
| 0 for OU | 113 | 53 |
| EAUX for EAU | 0 | 7 |
| EAX for EAU | 16 | 0 |
| EUX for EAU | 8 | 8 |
| AUX for EAU | 2 | 9 |
| UEX for EAU | 0 | 1 |
| EX for EAU | 3 | 0 |

## (vi) Addition, subtraction and replacement


(vii) Problems with accents

|  | VLA2 | VLB2 |
| :--- | :---: | :---: |
| E for É | - | 729 |
| È for É |  |  |
| Á for E |  |  |
| ó for EAU |  |  |
| or AU |  |  |
| C for G |  |  |
| G for C |  |  |
| Ć for G |  |  |

miay be partly or entirely due to English interference
5. Graphemes most commonly used to represent other graphemes

| Grapheme used | Frequency | Grapheme represented | Frequency |
| :---: | :---: | :---: | :---: |
| OU | 1104 | Ead | 389 |
|  |  | EU | 330 |
|  |  | OI | 247 |
|  |  | Others | 138 |
| AU | 384 | EAU | 178 |
|  |  | OI | 50 |
|  |  | Others | 156 |
| EU | 291 | EAU | 147 |
|  |  | Others | 144 |
| J | 64 | CH | 61 |
|  |  | Others | 3 |



Table 1: Order of difficulty of graphemes as indicated by test results. This table gives a true comparison between the two types of test.


