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Education Put to the Question

Education and Man's Destiny

Christopher Bezzina

'Very many countries regard the education of modern man as an exceptionally difficult problem, and all countries regard it as one of the greatest importance. And for all those who want to make the world as it is today a better place, and to prepare for the future, education is a capital, universal subject.

(Faure, 1972, Preamble p. xix)

It is over two hundred years since Rousseau wrote *Emile* in which he expressed his stupefaction at the way men were educated in the mid-eighteenth century. Was it really necessary for human beings to adapt themselves to the educational system? Would it not be better for the system to be adapted to the needs of men? The fundamental question was clearly stated.

Regularly since then, for each succeeding generation, the relationship between education and life has been the subject of innumerable studies. The list of protests, proposals and projects are endless. After Jean-Jacques Rousseau came Jean-Henri Pestalozzi in Switzerland, Friedrich Froebel in Germany, Bertrand Russell in England, John Dewey in the United States, Celestin Freinet in France, Anton Makarenko in the Soviet Union, Maria Montessori in Italy and dozens of other pioneers of educational reform. Nor should we forget all those philosophers whose first concern also was the education and development of man. Reading the writings of Hegel, Comte or Nietzsche we find reference to this same preoccupation — how can man, through his experiences, his thought processes and his relationship with others, develop his personality, strive constantly to improve himself and achieve real, untrammled, tangible self-liberation.

What emerges, among other things, from these various theories and explanations is that man, besides his social nature, (for man is a social being) is also characterized by a certain intrinsic individuality, and that his claims as an individual can come into conflict with the claims made upon him by his social obligations. This fundamental dichotomy arises from the fact that besides the life he has to live with others, each man has his own life. He has a separate consciousness which expresses itself in impressions, in experiences, in hopes, loves, hates and dreams which are in a very true sense private to himself. So that although we may accept the contention made by Marx and other sociologists that man's consciousness is socially determined, we feel that there is an area of individual freedom on which it would be immoral for the state or other human being to impinge.

The central age-old dilemma in education has been that of reconciling the demands of individual freedom, uninhibited spontaneity and creativity, with society's demands for conformity from its members. The dilemma has generally been solved within particular societies in terms of the ideological position of their rulers, which has generally in turn expressed itself, partly at least, in terms of the nature of the political order, and more generally in terms of the relationship which is taken to exist between the individual and the state. Where the political order has been conservative, society has characteristically looked to its educational institutions to perform a fundamental role of social control and cultural conservation. Education viewed in this way becomes the keeper and propagator of a society's identity in terms of the politically adopted ideology. Innovation or change is viewed suspiciously as it tends to disturb the balance of stability. Emphasis is laid upon 'tradition' and the task of education becomes that of conserving, enriching and transmitting to succeeding generations the accumulated knowledge, skills, beliefs and values on which society's cohesion and permanence depends.

This is, to a large extent, the situation we are faced with today. It is true that we have an overabundance of ideological material at our disposal but it is evident that educational theory has only a very tenuous link with educational practice. The traditional structures have constantly exercised a passive, sometimes even an active, resistance to a transformation of the educational process in the interests of both the individual and society. Of all human undertakings it would appear that education is the one that encounters the greatest obstacles in the path of progress.

Obstacles in the Path of Change

The obstacles in the path of change are well known. Some even have considerable justification. There is a handing down process in education that cannot be ignored. How, other than through teaching, can the present generation be linked with its predecessors? It is quite normal

and inevitable that the past, both that of mankind in general, and of each separate society, should occupy a position of honour in any body of teaching. It is a public treasure store and we are only too well aware of the feeling of deprivation experienced by those whose access to their cultural heritage has been limited, But, this 'tradition', precious though it may be, becomes an obstacle when it is not allied to a forward-looking view of life and when it becomes an alibi and a pretext for a refusal to give rein to the interplay of vital currents of thought. In fact, the whole system, as now constituted and operated, produces the obstacle.

Compulsory education, the good grounds for which no one would dispute, paralysis innovation. Why change? Why try to do better? Nor does the teaching profession, recruited and formed as it now is, greatly favour an imaginative or inventive spirit. By very reason of their profession teachers, at whatever level, are never participants in a dialogue. They do not have to justify themselves to their equals, but pass, by way of the examination system from the statu pupillari to one of full authority. Paulo Freire brings out his concern about this situation in his book *Pedagogy of the Oppressed*:

> 'Education is suffering from narration sickness. The teacher talks about reality as if it were motionless, static, compartmentalized and predictable. Or else he expounds on a topic completely alien to the existential experience of the students. His task is to 'fill' the students with the contents of his narration — contents which are detached from reality, disconnected from the totality that engendered them and could give them concreteness and become a hollow, alienated and alienating verbosity.
>
> *(Freire, 1972: 45)*

The outstanding characteristic of this narrative education being the sonority of words not their transforming power. Freire describes this as the " 'banking' concept of education" (1972: 46) in which the scope of action allowed to the students extends only as far as receiving, filing and storing the deposits. The alternative and desired goal being what Freire calls "liberation education".

As Hummel (1977) points out, with the amount of knowledge that is forever increasing it is no longer possible to assimilate what is merely a certain number of facts.

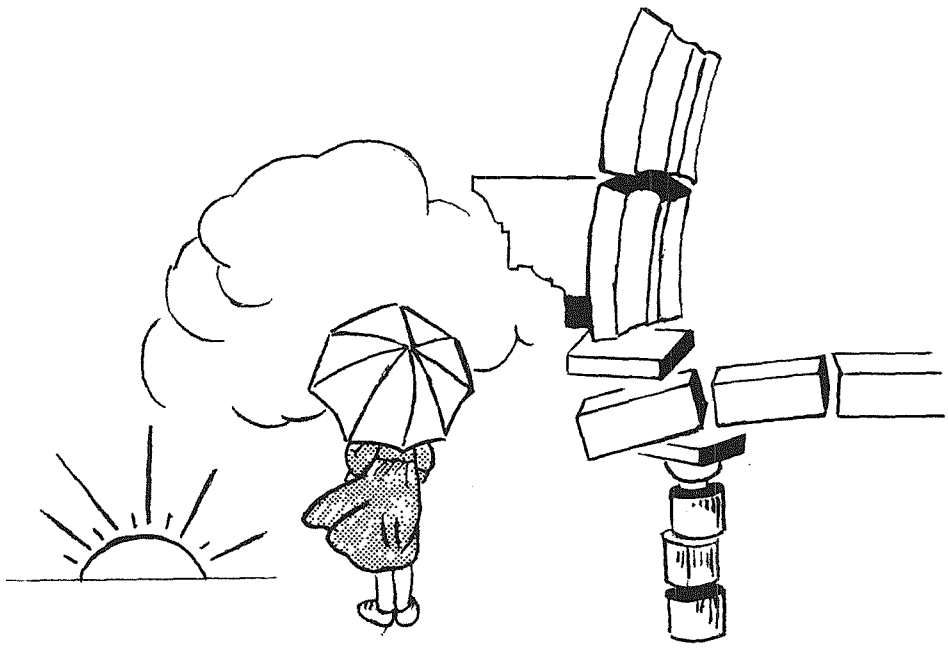
> 'It is important to accustom young people to extend their knowledge of their own accord and to make their way through the floods of scientific and political information. Much still remains to be done in this field.'
>
> *(Hummel, 1977: 19)*

This last statement is unfortunately so true and still so today. Concern is evident and it has been growing for some time now. The Faure Report (1972) and the report of the Club of Rome entitled *No Limits to Learning* (1979) show a deep concern for the future and stress that humanity is faced with what Botkin *et al.* call a 'world problematique' — an enormous tangle of problems in sectors like energy, population and food. We are faced with the choice of either unprecedented human fulfilment or else ultimate catastrophe. What will actually happen depends on another major and decisive factor — human understanding and action (Botkin *et al.*, 1979: 1). Botkin *et al.* show that a gap exists between humans, within humans, between sectors of humankind, between human actuality and human possibility, between an adaptational relation of man with nature and the destructive relation we now have, between current conditions of human development and what the imminent future demands; that the gap has been to a great extent created and perpetuated by our approach to and our use of learning, and that the only available instrumentality to avert human disaster and to begin to fulfil human potential is a new kind of learning.

Man's Future Lies in His Own Hands

Paulo Freire and Aurelio Peccei stress the importance of the individual. They agree that 'the point of departure of the movement lies in men themselves. But since men do not exist apart from the world, apart from reality, the movement must begin with the men-world relationship (Freire, 1972: 57). This is what liberation education is all about. It means that we abandon the present educational goal of deposit-making and replace it with the posing of the problems of men in their relations with the world. Thus problem-posing education would involve a constant unveiling of reality. It affirms men as being in the process of *becoming* - as unfinished, uncompleted beings in and with a likewise unfinished reality. In this incompleteness and this awareness lie the very roots of education as an exclusively human manifestation. The unfinished character of men and *the transformational character of reality necessitate that education be an ongoing activity.*

Education is thus constantly remade in the praxis. In order to *be*, it must *become*. Education is no longer about hanging onto the past, it is about adapting to change and it is about anticipating and constructing a future. Why is it therefore so important to grasp the future through education? It is because human action depends on values, emerges from values. But values do not exist in a vacuum. They are personal feelings about what is worthwhile, preferable, useful, humane, dangerous, degrading, unjust or cruel. Our values are responses to situations or realities as we see them and as we 'know' them to be. Action always



in search of ... a better future

expresses values, but values about what possibilities, what realities, what assumptions? The study of the future bridges the gap between values and action.

Education for a New World

The future means many things to many people. One thing is certain — it will not be exactly as each of us foresees it. The future is being shaped by decisions being made now. To secure our own interests in that future we must be aware of the direction current decisions are taking, the range of other options available, and we must know our own hopes and expectations. Yet, as futurists like Alvin Toffler and Wendell Bell point out the ultimate purpose of the study of the future is to assist people to create a better life for themselves. Perhaps the most important aim of contemporary human conduct should be to subject the rate and direction of social change to the will of human beings. The world of tomorrow rushes towards us at an ever-accelerating rate. We can either turn our backs and privatize our lives and so exist largely in the shadows cast by the futures that other people make. Or else we can confront the changes ahead of us and try to cope with them. This we can do, as Bell suggests, through adaptation. He goes on further to suggest that

> 'Perhaps we can even enter the building of the future ourselves, not just in the small worlds of self, family and friends, but in the larger worlds of collective decisions and struggle on community, national, and planetary scales. No matter what we do we cannot remain unaffected.
>
> (Bell in Toffler, 1974: 75)

Learning for tomorrow must deal not merely with what is possible or probable, but, perhaps more crucially, with what is preferable. By looking at the possible, probable, desirable and undesirable futures, we become aware that the decisions we make now will help or hinder the bringing about of the desired futures. Around two decades ago it was quite appropriate to think of the past fading into the present and the present flowing into the future. Naturally this is more evident in some countries than in others. Currently, however, the future has become so jammed with potentials, dangers and variables that there is an overspill from the future into the present. This means that every country, immaterial of wealth, size, geography, etc., will be effected. The issue is quite clear — the future is ours to make, the future does not just happen, it is the consequence of the choices, attitudes, values, energy, skills and imagination of a people.

This raises an important question. What futures do we want, and what values underlie our

choices? It is here worth quoting John Dewey who said:

> 'What avail is it to win prescribed amounts of information about geography and history, to win ability to read and write, if in the process the individual loses his own soul; loses his appreciation of things worth while, of the values to which these are relative; if he loses desire to apply what he has learned, and, above all, loses the ability to extract meaning from his future experiences as they occur?'
>
> (in Toffler, 1974: 257)

Now it sems that virtually every individual wants a favourable positive future. This is why the broad movement aimed at shifting education into the future tense also brings with it a heightened concern with values. A drastic transformation in our human values and commitments are necessary. We know that concern with values is not entirely new in education. However, what is new is the way in which this concern must express itself. In the past we taught values, or tried to, and in many cases we still are. Yet, simply 'teaching' values cannot and will not suffice for the future. Just consider the child of today. From every side s/he is bombarded with different and often contradictory sets of values. His/Her parents offer none, one or two sets of moralizations (communication on what to believe and how to behave). School teachers, which might have entirely different values, urge these upon the child. And, too, different teachers have different values. As the years go by other 'pressure groups' come into the scene: peer groups, youth movements, folk and rock heroes, sport figures, successful businessmen, T.V. idols, political leaders and even spiritual figures. As we look back at our childhood we realise that we have been taught values, we were taught what to believe and how to act. But in a world of confusion and conflict about values, this is not enough. I will not go deeper into the issue. I will end by refering to an article in Toffler's book *Learning For Tomorrow* entitled 'Values and the Futures Movement in Education'. In this article Howard Kirschenbaum and Sidney Simon suggest that there are powerful, non-moralizing ways to deal with values in education. They call for a clarification of values and that values should be seen as a process:

> 'If we want to prepare our children to meet the unknown challenges of the future, to be able to guide their lives through all the difficult value choices ahead, then we must consciously and deliberately go about teaching at least the following ... processes of valuing ... prizing, choosing, acting.
>
> *(op. cit., 1974: 263)*

This needs to receive inreasing emphasis in the home and in the curriculum. What we need is a well-thought-out futures curriculum. Toffler claims that introducing the future is a direct, yet relatively painless way to begin the move towards necessary changes, not only in curricula, but in the internal links with the community. In our schools and universities we must include not merely the study of past change, trends and cycles, and the causes of change, but also possibilities for the future: the range of alternative futures which, at any given time, could emerge into reality. We must include the study of the preferences of different individuals, groups and the human race as a whole, as well as the scale of values by which different possible futures are evaluated, both wished for and feared.

Several final general comments should be made about the role of the future in education. Obviously the future matters politically, socially, as well as educationally. The deep, often deep revolutionary currents in the world today call for establishing the future into learning as a solid part of curriculum and not just introduced on rare occasions (for example when a catastrophe has taken place). It should be stressed that at the individual level the ultimate purpose of futurism in education, is not to create elegently complex, well-ordered, accurate images of the future, but to help learners cope with crises, ambiguities and opportunities, to strengthen individual capacity to anticipate and adapt to change through invention, informed acquiescence or intelligent resistance.

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Developing a Theme in Social Studies: An Alternative Approach

Charles Borg

Introduction

Beyond Chalk and Talk

The Council of Europe in its documents on the place of History in Secondary schools, states that 'the teacher who stands in front of the class with a chalk is almost soundly condemned as the teacher who uses the stick'.

The statement, directed to teachers who still insist on boring their students by chalking and talking, leaves no room for interpretation. It is direct and clear, emphasizing that: beyond the world of soar throats and chalky air there is a wealth of resources that can inject interest and curiosity, make possible variation of teaching methods, provide stimuli for the fantasy world of students, acquaint students with research techniques, make it easier for students to pursue self-instruction, show the relation of previously isolated facts, relate abstract generalisations with realistic details and, above all, add clarity and precision to the way the lession is presented.

The teaching of Social Studies has to be reconsidered in the light of the above message. Teachers are no taxidermists. The stuffing of students with useless information has to stop. Alternatives exist. The use of resources is one of them.

The Theme

The wealth of information already available, the potential knowledge in the form of human experiences and the number of sites connected to the theme, qualify Transport as an ideal theme in any secondary level, social studies syllabus.

Transport is a multi-faceted theme. Aspects of transport include:

(a) *Chronology*: this aspect refers to the development of transport through the ages;
(b) *Description*: this aspect enters into the 'anatomy' of particular forms of transport and the various facts connected to them;
(c) *Socio-economic background*: this aspect refers to the different social groups and their respective socio-economic background, as reflected in the different types of transport used;
(d) *Demographic/land changes*: this aspect deals with the changes in settlement patterns and in demographic distribution, brought about by the development of better means of transport;
(e) *Other Communications*: Development of better communications runs parallel with the development of better transport. This aspect deals with the influence that transport and other communications exert on each other.
(f) *Historical reality*: this aspect deals with the historical context in which particular forms of transport were introduced or discarded.

Resources ensure the full development of the above aspects and the gross participation of all students. A discussion of the resources will now follow.

The Resources

For practical purposes, resources have been classified under four major headings: Audio, Resource Persons, Visuals and Sites.

Audio

(i) Recorded Interview

A recorded interview can be either *descriptive*, that is, the interviewed are only required to relate their experience/s, or *deductive*, in which case the interviewed are required to make conclusions, using their experience as background information.

In relation to the main theme, the recorded interview can be used to cover various topics. Typical examples include:

Descriptive
(a) An old timer who is interviewed on a particular form/particular forms of transport now extinct (ex. train, tram or harbour ferry boats).
(b) An interview with an offical who is asked to describe the organization of the means of transport which he represented/represents;
(c) An interview with a historian who is asked to give a general overview of transport through the ages;
(d) An empathic interview with a bus driver.

Deductive
(a) Advantages and disadvantages of an all-private transport — interview with the general public; a public transport official; a local car dealer;
(b) Abolition of all means of private transport — for and against — an interview with the general public; a traffic police; a local car dealer;
(c) Public transport: a 24hr. service — suggestions. An interview with the general public.

On the basis of the above examples, one can destinguish between a personal, one to one, descriptive interview and a deductive interview involving the general public.

In both cases, students participate actively by preparing the questions and effecting the interviews. In this situation, the teacher assumes the dual role of an advisor and quality controller, guarding against ambiguous, ill-phrased, unnecessary questions.

Students should be encouraged to look for the individuals which will eventually be interviewed — family friends, neighbours, relatives, important village people.

(ii) Simulated News-Bulettin

A simulated news-bulettin can cover a whole range of topics relating to transport. A few news items are listed below:
(a) news of a maiden voyage (ex. tram's maiden voyage on 23rd February 1903);
(b) news of the introduction of a new form of public transport (ex. train);
(c) news of strikes by public transport workers;
(d) news of incidents;
(e) news of extinction of a particular form of transport;
(f) news of the introduction of new routes (ex. tram: introduction of new routes — 14th March 1904).

News items can be followed by interviews. The following are some examples:
(a) news item: extinction of a new form of transport;
interview: nostalgic recalls
(b) news item: incident;
interview: eyewitnesses;
(c) news item: introduction of a new form of transport;
interview: people's first reaction.

A full news bulettin prepared by the pupils can follow an abridged form of the same news bulettin, prepared by the teacher as a model (the use of work directives is important to direct the pupils in finding information about particular news items.

Division of labour is highly recommended. Students are divided into groups and given different tasks:
Group A: Research; Group B: Script writing; Group C: Recording; Group D: Preparation of slides or pictures to complement the news bulettin.

(iii) Simulated Radio Programme

Radio programmes are preferably prepared in groups. Each group is assigned a particular theme or task, depending on the nature of the programme. If, for example, the programme's aim is the *development of transport through the ages*, each group is assigned a particular era:

Group A: Transport in Prehistoric times;
Group B: Transport in Medieval times;
Group C: Transport in British times;
Group D: Transport today.

If, on the other hand, the programme is aimed at concentrating on one particular form of transport, each group is assigned a particular aspect:

Group A: Socio-economic background;
Group B: Description of the particular form of transport;
Group C: Its effects on the local population.

On the organizational level, within each group there should be individuals in charge of:

(a) Production: (i) preparing background music, (ii) recording, (iii) script writing
(b) Research.

Teachers should ensure that their class is well equipped with a library on transport. Work directives — outlining the details to be covered by the group — will facilitate understanding of the group's tasks and direct the students to the appropriate sources.

(iv) Documentary

Documentaries can take different forms:

(a) T.V. Programme: In this case, one can either set up a completely new programme or adapt the radio programme.

A documentary will obviusly need pictures. Pictures, prepared by teacher and students, range from:
(1) Slides: Ready-made slides
(2) Slides: Acetate or glass slides;
(3) Strip Cartoons;
(4) Pictures enlarged by an epidioscope on a smaller scale...;
(5) Photocopied pictures;
(6) Line diagrams.

Drama can compensate for lack of movement caused by the absence of films.

(b) Documentary to accompany a visit: this would take the form of a running documentary which would describe the site or the items to be seen.

Example: a visit to former railway stations.

For this particular example the following points could be treated:

(1) The route followed by the train;
(2) The stations (in this case it would be a good idea if old pictures of the actual station are distributed among the students while the documentary is explaining that particular site);
(3) Habitation round the stations.

The documentary would be useless if it is not accompanied by an appropriate information sheet which would indicate the places or items to look at, while the documentary is explaining that particular place or time.

(v) Recorded Maltese Folk Songs

Maltese Folk Songs (ex. 'Il Karozzin' or 'Il-Vapur ta' l-Art') add enjoyment and can be used to introduce a particular form of transport.

(vi) Recorded Play

This source is preferably prepared by the teacher and read by the pupils. The playing of the recording is ideally accompanied by the script (which is photocopied and distributed to the students to follow the recording).

The same play can be drammatized. In this case, students can participate by: preparing sound for background music, preparing props and acting.

Recorded plays are ideal for covering themes like:
(a) Preparations for the introduction of railway in Malta. Such a play would include: discussions between government officials and company representatives regarding sites of stations, prices, timetable, number and quality of employees, target date, inauguration programme, etc.
(b) Conversation between two people boarding a first class, train cabin, from Valletta to Mdina.
(c) A conversation between two dockyard workers before boarding the harbour ferry.

Resource Persons

Resource Persons can be of Various Types:

(1) Parent/relative/friend of students or teacher;
(2) Person from town/village (or outside) who is/was directly concerned with transport (ex. a karozzin driver, a bus driver, a taxi driver);
(3) Individuals who have effected studies on this subject;
(4) Persons who are directly concerned with the building of a particular form of transport (ex. a bus body-builder, a 'serkin' maker);
(5) Government officials who are working/have worked in this sector;
(6) Private owner of a public means of transport;
(7) Town planner.

Resource Persons can:

either be asked to come to class,
or if he is an owner of a particular form of transport, the teacher can take the pupils to the place where the owner keeps his means of transport. The actual concrete object will help the owner to explain better, for example, the parts of his means of transport,
or if the individual is a builder of a particular form of transport, the teacher can take the pupils to his workshop,
or at times, resource persons can be combined' (ex. owner and historian: owner describes his means of transport — its structure and how it works — the historian explains the history of that particular means of transport).

Resource persons can be recorded. However, their physical presence is strongly recommended.

Visual

(i) Games

(a) Board Games (Reality)

A realistic board game is one which represents an actual historical situation. Normally, it would take the form of a contemporary map of the period. By following a set of rules, the pupils have to reach a certain goal. Rules and guide lines are contained in information sheets.

Reality games, which can be played either individually or in groups, are usually divided into three phases:
(a) Choice of site;
(b) Progressive development of an outline map;
(c) Class debate.

The following themes can be easily transformed into a board game:
(a) Selecting a site to develop it into a train station;
(b) Selecting a particular area and plan a series of railway tracks to cover the area;
(c) Planning a second, central, bus-stop station.

(b) Board Games (Abstraction)

These games are constructed on the same lines as commercial games, such as 'monopoly', 'snakes and ladders' and 'ludo'.

Such games are easily adapted to suite different purposes. Typical examples include:

Ludo

A ludo game can be devised to illustrate various forms of transport now extinct, their routes and their respective termini.

The corner boxers would represent termini or stations of four different forms of transport. The central boxes represent Valletta, so that all forms of transport are directed to the city. The normal, common lane is replaced by four lanes running concurrently. Each lane represents the route taken by a particular form of transport.

Snakes and Ladders

This game could be used either to illustrate the development of a specific form of transport (ex. transport by sea) or to represent the general/ historical development of transport.

(c) Simulated Games

These games would require space. The school's playground is ideal.

The following is an example of a simulated game which should serve as a model for others:

With the help of a map, students draw the route, which was once taken by the train on ground. Each station is marked four steps away from the nearest station. Students are then asked to organize themselves into groups. All groups start from the terminal station (Valletta or Mdina station).

Students are asked to choose one from four possible boarding tickets: (a) first class, (b) second class, (c) third class, (d) working class. Each ticket represents the level of difficulty of the question which will be asked to the group, that is: (a) very difficult (b) slightly less difficult (c) fairly difficult (d) easy. A good answer for type (a) question will entitle the group to move from one station to another (four steps), for type (b) question three steps, and so on. Groups can change the ticket and, therefore, the level of difficulty, from one turn to another. The group which reaches the opposite terminus first will be the winner.

(ii) Cards

(a) Information Cards

Information cards usually consist of written information about a very specific topic. Information cards are normally illustrated by pictures or diagrams. Appropriate illustrations are very important since the number of words in such cards is restricted.

The use of information cards ranges from providing background information to introducing or concluding a lesson. They can cover a lot of topics, ranging from descriptive (ex. information about the history of a particular form of transport) to informative (ex. information on where extinct forms of transport can still be seen).

A library of information cards could be set up in one of the corners of the class.

(b) Individual Task Cards

Task cards aim at fulfilling the needs of a mixed-ability class. Task cards basically consist of: (a) a question or statement; (b) information on where to find the answer for the question/statement; (c) drawing/s.

Tasks cards are graded according to difficulty. Vertical grading refers to the progression in difficulty from one task card to another. Longitudinal grading refers to the grouping of task cards according to difficulty.

By preparing different task cards, teachers give each student a task suited to his ability. In this way, students can work at their own pace and complete their task in time.

(c) Assignment Cards

Assignment cards usually follow information cards. However, they are not necessarily directly connected to them. Assignment cards usually require students to: answer questions (factual and/ or intuitive), interpret pictures or figures, draw figures.

A library of assignment cards can also be set up in class.

(d) Work Directives

Work directives are generally used during museum or site visits. Work directives usually consist of:

(a) Instructions to look at: (i) a museum piece (ex. a sedan chair) or (ii) a specific part of a site;
(b) Specific instructions to effect manual work (ex. measuring the length, depth, width of a 'cart-rut')
(c) Instructions to draw (ex. a museum piece);
(d) Answer questions;
(e) Write comments;

(iii) Primary Source Material

Primary source material related to transport includes originals or copies of: newspapers, tickets, timetables, government statistics, chronicles, photographs, postcards, souvenirs, paintings, wood-cuts and litographs.

(iv) Secondary Source Material

Transport has been treated by professional and amateur historians. Popular and academic literature on the subject can be found at the national library.

(v) Simulated Documents

Teachers can transform their background knowledge into simulated documents. Simulated documents can take different forms: (a) newspapers (ex. reporting: introduction or end of a means of transport, new routes, new time-tables, accidents; increase or decrease in fares, strikes, etc.); (b) parish magazine (ex. reporting: introduction of new routes to town/village; village/ transport statistics, accidents in town/village, etc.); (c) official documents (ex. minutes of meetings held

between company representatives and government officals prior to the introduction of the railway system in Malta).

(vi) Puzzles

(a) Jigsaw Puzzles

Pictures related to transport (ex. picture of a map showing the route followed by the train, picture of a tram, ferry boat or sedan chair, etc.) are glued on a cardboard paper. Before cutting each picture into pieces, a typed paper with information about the subject (depicted in the picture) is stuck to the back of each picture. When students form the picture, they turn it upside down and read the information. Instead of information, one can put questions or instructions to look for information in the class library.

(b) Word Puzzles

Students are best organized in groups. Each group will construct its own word puzzle. Groups will then exchange puzzles.

(vii) Models

Collecting transport models is one of the most favourite hobbies among students (especially boys). Models of cars, lorries, bicycles, trains, carts, trams, karozzini, etc., can be brought into class and displayed in a transport museum.

(viii) Artefacts

Where ready-made models are not easy to obtain, students can be directed to construct their own models. Needless to say, models which are elaborate and difficult to produce should be avoided.

Artefacts should be produced from material readily available at schools, preferably cardboard paper. Clear instructions of the stages followed in the building up of the model are to be supplied by the teacher.

(ix) Slides

Students can produce their own slides by using indian ink and acetate sheets. Also, the teacher can organize a trip and ask students to take slides of what is available (ex. museum pieces, cart-ruts, railway stations, train cabins at Marsaskala and B'Kara, etc.).

(x) Time Lines/Charts

One concept which presents early-secondary students with some difficulty is that of time. The use of the most simple form of time chart/line can help to overcome this difficulty. A line of time is the simplest way of representing visually a period of time and it is a very useful way of enabling students to get some idea of the relative length of different periods. The time chart is a useful devise for illustrating the correct sequence of events and for bringing out the possible relationship between events.

Time charts/lines can be:
either 'periodical', that is concentrating on a particular period (ex. transport during British rule),
or 'general', that is, focusing on no particular period (transport in Malta through the ages);
or 'specific', that is, concentrating on a particular form of transport (ex. public transport).

Sites

If we accept as a fact the long-held idea, namely, that the number of ruts which interrupt the surface of the rock, in many parts of the island, are prehistoric cart-ruts then, teachers can choose any of the great number of sites available and organize a fieldwork study on transport in prehistoric times. A fieldwork study of these ruts will eventually consist in describing the site, measuring the ruts (length, width and depth), measuring the area which they cover, drawing a picture of the site and comparing the above observations with observations made for other sites.

Historical sites related to transport are unfortunately limited. The only real, worthy trip is along the route which was once followed by the train, that is, from Valletta station to Museum station at Rabat. Students will eventually be taken to still existent stations, pass through tunnels and over viaducts. Work directives are strongly recommended.

Studies on modern transport can be carried any time on our roads. Students are best organized in groups and placed at strategic points on a major road. Each group is then assigned particular observations (ex. number of women/men using private transport, number of men/women driving company transport, etc.). Back in class, students can build tables (based on statistics) and hold various discussions.

Conclusion

The hard-working, optimistic teacher will immediately complain about the impossibility of ever managing to produce such a vast quantity of resources. He/She may be right. However, the text itself shows that teachers need not produce most of the resources themselves. Resources should eventually form part of an all-activity lesson focusing on the theme of learning by doing. Moreover, teachers can adopt different strategies with different classes. By so doing, the same goal will be reached and a number of resources will be used/produced by each class. These resources can be pooled and exhibited. A Transport Day' can also be organized at school, where drama, slide and sound shows, discussions, interviews and games will eventually figure among the major activities.

Children's Wishes

Valerie Sollars

Summary

Through the use of a projective technique, the three greatest wishes of 7-year-old and 10-year-old children were analysed. The sample under study included 227 girls and 256 boys attending five primary state schools in Malta. Each child had to think of three wishes which in his/her opinion would be suggested by the child of the same sex in the story. Significance was obtained when considering age as a variable. When considering sex differences, it was found that boys and girls conform to wishes and needs related to their sex whereas certain wishes are associated with one sex group only.

Introduction

It is almost imperative for a student of child psychology to study children's wishes as they are a reflection of various aspects of a life. Wishes reflect fears, needs, emotions, ambitions and expectations.

By expressing one's wishes an individual may give vent to his anxieties. Wishes shed light on what scares an individual, what interests him, whether his needs are to be satisfied in the immediate future as well as the aspirations and plans as a grown up. Wishes can be pleas for simple, tangible articles buty they may also transport an individual into the realm of fantasy and imagination.

Getting to know one's wishes serves as an indication of how the individual would like to grow and develop unfettered by undue pressures and impositions; how an individual rates himself and how he sees himself in relation to his peers and adults.

Wishes also indicate the type of shortcomings which preoccupy an individual and how he hopes to overcome them.

There are two methods of finding out one's wishes — by a direct method or by using a projective technique. Studying wishes by the direct method involves a straightforward question to be answered by the individual concerned. Winkley (1982) presented the situation in a similar way. In the sample:

> "the children were asked to 'imagine that magic could really happen and that wishes could come true' and then to write down their three wishes" *(p. 477).*

The advantage of this method is that an individual definitely knows that he has to think up his own wishes. However, one might be inhibited or feel shy to do so.

The problem is thus overcome by the projective method whereby an individual's wishes would become known in an indirect way.

Rationale of the Projective Technique

With all types of projective techniques, ambiguous stimuli are presented. These stimuli are introduced to the subject as ambiguous situations, pictures or tasks. For example, in the Thematic Apperception Test, developed by H.A. Murray (1938), a subject is required to interpret a picture by telling a story. In the Children's Apperception Test (Bellak, 1954), use is made of a series of pictures showing animals in anthropomorphic situations. Other such techniques are Raven's Controlled Projection Test where the subject does a free drawing and is simultaneously told an incomplete story, and Rosenzweig's Picture Frustration Test where individuals are shown in ambiguous and frustrating situations.

It is assumed that since the task is ambiguous and there are no wrong answers, the individual will project his feelings, attitudes, pressures and needs into the situation. Of course, one cannot be too careful with the interpretation of the data. However, considering the complexity of personality testing and the objections which exist against different assessment techniques, it would be more fruitful to concentrate on improving test interpretation rather than argue about the validity or otherwise of the projective techniques.

Plan of the Investigation

Subjects

Five primary state schools were chosen for the study. Seven- and ten-year-old boys and girls from Year 3 and Year 6 classes were eligible for the study. The total sample was made up of 483 children — 240 were from the younger age group whereas the remaining 243 students were from the older group. According to sex groups, there were 256 boys and 227 girls.

The sample also included various ability

levels. The pupils were streamed according to their academic qualifications; the number of streams depends on the school population. For the study all streams were considered.

Experimental Procedure
To find out the children's wishes, the test was administerd in two ways:
(a) in the form of an interview with Year 3 and the Year 6 lower streams
(b) in written form for the upper and middle streams of Year 6.

In all classes instructions were given in Maltese. All responses, whether written directly by the pupils or by the interviewer, were noted on a specially prepared form.

The oral form – With the younger pupils, a story was made up and related as follows:

> 'Once upon a time there were two seven-year-old children. They were brother and sister. One night they had a dream about a fairy. The fairy asked them to make any three wishes as she could give them anything they asked for.'

Pupils were then asked to come outside class individually and state the wishes of the boy or girl. To prevent pupils from talking amongst themselves, the teachers were asked to go on with the lessons when the interviewer stepped out of class.

The written form – Year 6 pupils in the upper streams were asked to think and write down the wishes of a 10- to 11-year-old child. They were told that these wishes would be granted by a special person which could make any wish come true. They were allowed to write the wishes in Maltese or English. With Year 6 pupils from the lower streams, an interview was carried out in the same way as with the younger students.

All pupils were informed that this was neither a test nor an examination.

Results

The wishes given by the sample were classified into various broad categories, each being in turn sub-divided into further classifications. This classification was based on that suggested by Winkley (1982) with some minor modifications. Table 1 shows the relevant classes and related categories.

To test the results for statistical significance the test for differences between proportions/ percentages (Cronbach, 1970) was used.

The wishes recorded were analysed in the following ways:
(a) according to age (comparing Year 3 to Year 6 wishes)
(b) according to sex groups (comparing boys' wishes to girls' wishes).

Class	*Category*	*Sub-categories*
P	Possessions	P1 - Money P2 - Animals P3 - Houses P4 - Vehicles P5 - Toys P6 - Books P7 - Others
F	Future Achievements	F1 - Career (Reality) F2 - Career (Fantasy) F3 - Power F4 - Fame F5 - Scholastic Achievement F6 - Marriage/Children
N	Personal Needs	N1 - General Need N2 - Real Problem N3 - Change in Self N4 - Magical Change
T	Travel	T1 - Holidays T2 - Adventure T3 - Emigration
SC	Social Conscience	
RF	Removal of Fear of death or illness of oneself or others	
UN	Unclassifiable	

Table 1: Class, Category and Subcategories of Wishes

Age Differences
The results shown in Table 2 were obtained when age was considered as a variable. The rank order for both age groups follows the same pattern but there are significant differences in the frequency of wishes made for each broad category.

Category	*% Year 3*	*% Year 6*	*z*	*p*
Possessions	66.8% (956)	39.6% (576)	14.60	< 0.01
Future Achievements	22.1% (316)	30.6% (446)	5.17	< 0.01
Personal Needs	6.0% (86)	12.1% (176)	5.69	< 0.01
Travel	3.5% (50)	10.3% (150)	7.18	< 0.01
Social Conscience	0.8% (11)	1.7% (25)	2.17	< 0.05
Removal of Fear	0.0% (0)	1.2% (17)	4.20	< 0.01
Unclassifiable	0.8% (12)	4.5% (66)	—	—
Total	100.0% (1431)	100.0% (1456)	—	—

Table 2: Distribution of Wishes by Age and Significance of Age-differences.

When considering the subcategories for each section, significance at the one percent level was found with the subgroups 'Money' (P1), 'Toys' (P5), 'Others' (P7) and 'Travelling' for holidays (T1).

There were a great number of Year 6 pupils who made wishes for money and travelling for holidays whereas toys were widely selected by the younger age group.

Sex Differences
When wishes made by boys were compared to those suggested by girls, not many statistically significant distinctions resulted (Table 3).

Category	*Boys' Wishes*	*Girls' Wishes*	*z*	*p*
Possessions	56.7% (434)	48.8% (332)	3.00 <	0.01
Future Achievements	24.7% (189)	28.8% (196)	1.76 >	0.05
Personal Needs	7.2% (55)	10.3% (70)	2.09 <	0.05
Travel	8.2% (63)	6.6% (45)	1.15 >	0.05
Social Conscience	0.9% (7)	1.5% (10)	1.06 >	0.05
Removal of Fear	0.4% (3)	0.7% (5)	0.77 >	0.05
Unclassifiable	2.0% (15)	3.4% (23)	—	—
Total	100.0% (766)	100.0% (681)	—	—

Table 3: Distribution of Wishes by Sex and Significance of Sex-differences.

As can be seen from the results, significance at the one percent level was achieved with the category 'Possessions' whereas significance at the five percent level was obtained with the category 'Personal Needs'.

With the various subcategories, significance at the one percent level was achieved with 'Vehicles' (P4) where boys made more wishes of this type than girls; and the subcategory 'Others' (P7). In this last sub-category, girls made a number of wishes for clothes and jewellery.

Discussion and Conclusions

It seems perfectly logical that significant findings resulted when considering age as a variable. This is a clear indication of the changes which do occur between Year 3 and Year 6 children when it comes to making their wishes. The younger group gave great importance to material goods and tangible articles. With Year 6 pupils there was a sharp decrease in wishes for toys and an increase in the requests for houses, vehicles and money.

Whereas at age 7 children are sill engrossed in their fantasy world expressed through play, ten-year-olds are gradually realizing that they are becoming less dependent on adults and eventually will look for new experiences outside the home. In fact, with all the subcategories of Future Achievements, there were a greater number of wishes expressed by the elder group of the sample.

At ten, children are already making more wishes for Careers, Scholastic Achievements and Marriage than seven-year-olds. They also make more wishes for changes in oneself, solving real problems as well as other general needs. They are hampered by fears which might have never occurred to them at a younger age and are becoming aware of showing social conscience and concern. Even wishes related to travelling for holidays or for the sake of adventure, attract the elder children.

All these findings direct the researcher to conclude that children are aware of what is relevant and appropriate for their particular age. They are not harassed by undue pressures or worries when still young — they are still the centre of attention, finding everything prepared for them. Later on they start becoming aware of difficulties and problems which have to be met with and solved as best as possible.

When considering wishes made by boys and girls, fewer significantly different findings resulted. It seems unlikely that boys and girls at this age opt for different kinds of wishes.

In the research carried out by Winkley (1982), boys made significantly more wishes for 'Power', 'Money', 'Fantasy Career' and 'Large Vehicles'. The girls made significantly more wishes than the boys for 'Change in Home Circumstances', 'Scholastic Achievement', 'Real Need', 'Marriage/ Children' and 'Real Problem' categories which — according to Winkley — reflect an involvement with the real world. Boys' wishes were more fantasy based.

Some of these findings match those of the local sample. Vehicles, for example, are significantly related to the mechanical world which in turn is related to masculinity. On the other hand, girls are more prepared to express the wish of getting married and having their own children.

When considering various subcategories, such as choice of a career or preference of toys, there were clear differences in the choices made. Whereas boys opted for occupations such as those of a policeman, pilot, carpenter, mechanic and doctor, the girls' predominant choices were for the jobs of teachers, nurses and airhostesses. As regards toys, boys go for cars and mechanical devices while girls opt for dolls. In fact, if typical male and femal characteristics are drawn up, it can be said that boys and girls know which features pertain to their sex group. Within each category there were subcategories which were more popular with boys and others which came closer to that which is expected of the female sex. For example boys want work, girls want to get married; the former concentrate on the mechanical world of cars and vehicles; the latter want clothes; males opt for certain types of jobs, females choose other occupations; boys play with certain types of toys, girls have other tastes.

Children are being brought up within a framework of sex roles where boys and girls are expected to act and behave in ways suitable to their sex. What is appropriate for one group is not welcomed within the opposite sex. Such attitudes are being enhanced from the moment of birth, within the family context and reinforced later on at

school and in society.

It can be concluded that children like any other age group of the human race, all have their own wishes and needs. Differences arise because of the motivation one has and the goals for which fulfilment of these wishes is sought. Satisfaction or fulfilment of wishes may be immediate or delayed and age is an important factor in this respect. However, what can be said with certainty is that whatever type of wish is expressed — whether seeking belongingness, security, independence, adventure, new experiences, constructing or knowing something, requesting a material possession or a future achievement, whether the wish arises from processes taking place within the body or stimulated by external objects or even the need for expression of feeling — all children have their wishes and needs and they should be helped as much as possible to facilitate the realization of these wishes.

It ought to be pointed out that tentative explanations have been suggested since on the basis of what is known about differences in attitudes one cannot give absolute interpretations of these results. The element of subjectivity could have been minimised by offering the sample a limited number of responses and a forced choice would have had to be made. It would also be interesting to study wishes of other groups as well as factors — such as family background and ability levels — which could contribute to a meaningful understanding of why children make particular wishes.

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Choice of Theme in John Fowles's Mantissa.

Nathalie Schembri

Introduction

I have chosen the second chapter of my thesis (The Theme of Art and the Artist in John Fowles's *Mantissa*) as opposed to any of the remaining five for publication because I believe it to be largely self-sufficient. However, a short note on the study as a whole is, I think called for here.

The basis of the thesis is the discussion of the major thesis of John Fowles's novel *Mantissa* (1982), with special emphasis on the literary devices which the author chose to use in order to develop it.

Chapter II in particular is an attempt to examine the significance of such a choice of theme in the context of existing postmodernist trends and especially of John Fowles's own work to date. This prior to a discussion of the literary devices themselves, namely choice of character, narrative structure and dialogue, each of which is dealt with in a further chapter.

I feel I should also point out that the whole study works towards a reading of *Mantissa* as a formal as well as thematic exception to the rest of Fowles's work since the reader will understand this chapter work fully if he bears this in mind.

In the process of creating a work of art an artist is continually making choices which will determine the nature and quality of his artefact. However, in order to appreciate the significance of each choice, one must first place the artist in his tradition. Clearly, for example, the use of the technique of the omniscient author by a novelist writing in the second half of the twentieth century, and its use by an eighteenth or nineteenth century writer will evoke different critical comments. Whereas the latter is adopting a technique typical of the age, the former is deliberately ignoring the quarrel of all postmodernist writers with the validity of this technique as a narrative device, and as such his choice acquires special significance. In some cases,

it may also be interesting to examine these choices in the light of the writer's other works. This is, I believe, the case with John Fowles's choice of theme in *Mantissa*.

In Fowles's own words, *Mantissa* is about "the process of writing" or more specifically, about the relation of the writer to the written in the creation of a literary text. Viewed in the light of all metafictional novels from those of John Barth to those of B. S. Johnson and Jorge Luis Borges, this particular choice of theme would not seem to warrant any critical attention. Almost all metafictional writers deal with it exclusively, although from various angles and with varying degrees of emphasis. As Miles Green, Fowles's surrogate in *Mantissa*, quite succinctly puts it, 'Serious modern fiction has only one subject: the difficulty of writing serious modern fiction'.

However, one has only to examine briefly the themes that John Fowles explores in his other novels to realise that although he had dealt with this theme before, it was always given secondary importance and invariably featured as part of a more widely human context.

In *The Collector*, *Daniel Martin* and *The Ebony Tower*, where artists feature as major characters, they never appear in the process of creating their work (as is the case in *Mantissa*). Their development as artists is always seen within the context of their development as human beings. In *The Ebony Tower*, for example, Breasley's traditionalist stand against the fashionable notions of abstract art is brought out through the human relationship which develops between him and David Williams (as representative of abstract art). The reader is not made directly aware of the effect that his conflict has on Breasley's painting. His landscapes are distant objects in the background of the story. The foreground is taken up by the two men themselves, and increasingly by the two men as human beings rather than as artists.

In *The Collector*, the central drama is not Miranda's development as an artist as evident in her relationship with G. P., but her development as a human being as evident in her relationship with Clegg. Her being as an artist heightens and makes more poignant this drama but does not constitute it.

Similarly, it is Dan's sensibility as a human being which is focused on in *Daniel Martin*. No special emphasis is put on his artistic sensibility. Dan is a script-writer, but he is also father to Caro, ex-husband to Nell, lover to Jenny and friend to Anthony. The only character in *Daniel Martin* who is shown in the process of producing a text is Jenny, and she plays a relatively minor role in the novel.

A more subtle exploration of the theme of the artist and his relation to the work of art appears in *The Magus*. Conchis's role is not overtly that of an artist. However, Fowles points towards an understanding of his role as such a one when he compares him to a novelist at various points in the novel. As such, therefore, the understanding of Conchis's role as a quasi-artistic one serves to give the reader a clearer understanding of the true nature of his role — that of a kind of demi-god playing a godgame with Nicholas, much as a novelist does with his characters. However, the ultimate aim is not the artistic one of creating a text but the human (albeit at times cruel) one of liberating Nicholas from the petty bourgeois mentality of which he was formerly the victim.

Strangely enough, it is in *The French Lieutenant's Woman* and the short story *The Enigma*, where the theme of the artist and his relation to the work of art seems to have been most neglected, that Fowles comes closest to *Mantissa*.

In *The Enigma*, John Marcus Fielding, a prosperous and dedicated Member of Parliament disappears without a trace. The police investigate his case without success. Finally, a young sergeant takes up the case. In the course of his investigations he meets Isobel Dodgson, the girlfriend of Fielding's son Peter. They become friendly and she is induced to put forward a theory of hers explaining Fielding's disappearance. The first sentences that she utters, 'Nothing is real. All is fiction.', are the basic premise on which all of *Mantissa* is built. In *Mantissa*, Fowles deliberately plays tricks on the reader by exploring the notion that there is no such thing as an ultimate 'reality'. Every time the reader thinks that a screen of illusion has been stripped to reveal the reality behind it, he is made aware that the 'reality' is only another screen which is successively stripped to reveal another one until the reader comes to the conclusion that there is no underlying plane of reality at all. Hence, 'Nothing is real. All is fiction.' This is very much the basis of Isobel's explanation of Fielding's disappearance. She asks the sergeant to imagine that both they and Fielding are characters in a novel (which the reader knows they are), thus bringing into question their existence as "real" human beings. They are all being written into a novel by an author and are therefore controlled by him, she says. The problem is: How absolute is the writer's control of them? Isobel posits the theory that Fielding has disappeared because he can no longer stand being the victim of this system by which his every move is controlled. He has retaliated by disappearing out of the text altogether, thus asserting his ultimate freedom.

It is therefore in *The Enigma* that the idea of a writer not having absolute control over the characters that constitute his fiction is first explored. In *Mantissa* this is played out to the full in Part II,

where Erato and Miles are presented arguing about which one of them is master. In other words, who decides what in the writing of a text. Erato's complaint that she is tired of having to obey all the rules laid down by Miles, who has written her into existence, is much the same as the one that Isobel imagines caused Fielding to assert his freedom by disappearing out of the text.

Fowles is here making a point about the nature of the freedom that a character in a book has which is basic to an understanding of *Mantissa*. It is stated clearly in Chapter 13 of *The French Lieutenant's Woman*:

> 'We (novelists) know a world is an organism, not a machine. We also know that a genuinely created world must be independent of its creator; a planned world (a world that fully reveals its planning) is a dead world. It is only when our characters and events begin to disobey us that they begin to live.'

He then explains how Charles (one of the major characters in *The French Lieutenant's Woman*) has just gained his freedom by 'disobeying' him, and goes on:

> 'It is not only that he has begun to gain an autonomy; I must respect it, and disrespect all my quasi-divine plans for him, if I wish him to be real.... There is only one good definition of God: the freedom that allows other freedoms to exist. And I must conform to that definition.'

Fielding 'died' (disappeared textually) because he was not given enough freedom to exist. This notion forms the crux of a heated argument that Erato (the character) and Miles (the writer) have about the nature of her existence. Miles says:

> 'You are viciously and sadistically breaking all the rules.'
> Her face flares round. 'Your rules!'
> 'All right. My rules.'
> She looks away again. 'I'm sick to death of them. Of having to pretent I exist in a way I never would, if I did.'
> 'You damn well exist for me, anyway. Just as you are.'
> 'Heil Hitler.'
> 'Okay. For the sake of the argument: Hitler says you exist. As you are.'
> 'He can't. You have to have certain elementary freedoms to exist.'

However, it is important to realise that there is a significant distinction in the way in which the relation between a writer and the characters he creates in a given story is presented in *The Enigma* and the way it is presented in *Mantissa*. In *The Enigma* its existence as a *theory* is made obvious. It is a hypothetical case which a young lady with a literary bent (she is trying to write a novel) is making as a possible explanation to a given fact, namely John Marcus Fielding's disappearance. She admits herself that 'it's very wild' and 'only a hunch' with no proof at all to support it. Since John Marcus Fielding is never found, and the 'theory' is never proved wrong or right, the reader can equally accept or reject it. This is not the case in *Mantissa*.

In *Mantissa*, the reader is not asked to *imagine* that there is a novelist who is writing a story in which there features a certain character called John Marcus Fielding.... The reader is actually *presented* with an author, Miles Green, and a character, Erato, and a text which is in the process of being written, but of which the reader is never given the final version, only some of the endless versions which it goes through. It is not a story within a story (as is the case in *The Enigma*), it is not an explanation of the behaviour of a character given by the author in a long aside (as is the case in *The French Lieutenant's Woman*), it is *the* story, *the* text, itself.

It is possible to say that Isobel Dodgson's 'theory' in *The Enigma* and Chapter 13 of *The French Lieutenant's Woman* constitute the germ out of which *Mantissa* grew, but it remains the germ of an idea which was only fully developed later, in *Mantissa*.

There is no doubt, therefore, that a definite shift in emphasis takes place as far as the importance of this theme is concerned, with the writing of *Mantissa*. *Mantissa* is unique in giving it prominence. Its choice as a major theme is therefore a significant one because it indicates that whereas in his former novels, Fowles had some reason to 'question his modernity', since he gave supreme value to the representational function of art, he has now (but only in *Mantissa*) turned the tables to give major importance to its reflexive function.

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Qu' Est — Ce Qui Distingue une Simulation D'un Jeu de Rôles dans L'Enseignement/ Apprentissage d'une Langue Étrangère?

Nöel Caruana Dingli

Dans une approche communicative de l'enseignement des langues étrangères les jeux de rôles et les simulations apparaissent comme deux procédés pédagogiques particulièrement adaptés à placer l'apprenant dans des situations de communication. Ceci est d'autant plus vrai parce que les actes de parole et leurs notions correspondantes sont mieux exploités a partir de ces procédis pédagogiques qu'à partir d'exercices formels de répétition ou de mémorisation. Comme le dit Sophie MOIRAND (1982, p. 38), "les simulations ("faire semblant de faire quelque chose") et les jeux de rôles ("faire semblant d'être quelqu'un d'autre") servent à faire entrer la communication dans la classe". En effet, on peut considérer ces deux activités comme des micro — stratégies (par opposition à des macro — stratégies; voir ibid., p. 57) qui cherchent à organiser des procédures d'enseignement/apprentissage permettant la production d'énoncés en communication.

La simulation et le jeu de rôles se ressemblent sur certains points: dans les deux cas an a des techniques du "comme si" et du "faire semblant de ...". De plus, les deux techniques ne s'excluent pas mutuellement. Comme le précisent G. DALGALIAN et alii (1981, p. 60):

> "On peut en gros distinguer le 'faire semplant d'être quelqu'un d'autre' ou jeu de rôle, et le 'faire semblant de faire quelque chose', ou simulation, qui ne sont pas exclusifs l'un de l'autre et se fondent par exemple dans la création théâtrale."

En fait, il est possible (J. TAYLOR, R. WALFORD, 1978) de considérer le jeu de rôles comme un type de simulation qui est moins structuré qu'une simulation proprement dite. Quoi qu'il en soit, malgré les ressemblances de ces deux activités, il est important de pouvoir distinguer le jeu de rôles de la simulation. Une définition de ces activités fait déjà ressortir les différences principales. Francis DEBYSER (L.F.D.L.M. n 123, août — sept. 1976, p. 24) décrit la simulation de la manière suivante:

> "Nous appelons ici *simulation*, dans une perspective de la classe de langue, la reproduction simulée, fictive et jouée d'échanges interpersonnels organisés autour d'une situation problème: cas à étudier, problème à résoudre, décision à prendre, projet à discuter, conflit à arbitrer, litige, dispute, débat, situation de conseil. La simulation obéit à un canevas relativement précis et réglé à l'avance même si les participants doivent y faire preuve d'initiative et si la ou les solutions apportées au problème dépendent d'eux."

On peut définir le jeu de rôles (ibid., p. 26) comme "l'animation par deux ou trois étudiants de scènes ou de personnages plus spontanés, plus fantaisistes, éventuellement plus caricaturaux que dans les simulations proprement dites, sans canevas ni scénario prédéterminés, sans documentation ni préparation autre que l'indispensable nécessaire pour le point de départ." En d'autres termes, une simulation, contrairement à un jeu de rôles, ne s'improvise pas. Elle repose sur un canevas préréglé qui fournit des données aux participants et leur permet de construire un modèle. Puisqu' une simulation repose sur un canevas bien précis qui doit être suffisamment décrit à l'avance, il faut disposer d'un matériel simple mais réaliste afin que l'imitation soit vraisemblable. Un tel matériel n'est pas nécessaire dans un jeu de rôles car, dans cette activité, la caractérisation n'est pas bien définie. Dans un jeu de rôles, un peu d'invraisemblance n'est pas gênant.[1] Pour résumer, on peut dire que:

> "Alors qu'en simulation, on développe une situation dont les composantes essentielles doivent être *programmées à l'avance* (scénario) et sont donc *prévisibles, le jeu de rôle est avant tout le lieu de l'improvisation, donc de l'imprévisible.*"
>
> *L.M. CARE, K. TALARICO, 1983, p. 197.*

La simulation est donc beaucoup plus structurée et contraignante qu'un jeu de rôles. A titre d'exemple, dans un jeu de rôles, la jeune fille qui rentre chez elle à une heure du matin peut inventer n'importe quelles excuses (plausibles ou non) pour essayer de calmer ses parents furieux. Par contre, une bonne simulation ne permet pas autant de fantaisie (sinon elle bascule dans le jeu de rôles) non pas seulement à cause des règles qui la régissent mais surtout par souci de réalisme (la vraisemblance). Cette jeune fille ne pourra pas inventer n'importe quoi et, puisque les rôles sont caractérisés en simulation, tout dépendra de la situation socio — professionnelle de la famille, de l'âge de la jeune fille, de ses fréquentations, du caractère répété ou non de l'incident. Par contre, dans un jeu de rôles, on part d'un scénario minimal (un "canevas") et la caractérisation n'est

[1] Par contre, la recherche de la vraisemblance est très évidente dans une simulation comme *La une* où les participants tentent de réaliser en un temps limité (3 heures) la première page d'un journal (voir CARE, TALARICO, 1983, pp. 185-195).

qu'esquissée. En voici quelques exemples (F. DEBYSER, 1976, p. 26):

— Un touriste demande un renseignement à un agent.
— Madame X téléphone à un responsable du programme de télévision pour se plaindre du fait qu'on ne présente pas assez d'émissions sur les chats.
— Pierre et Marie se disputent parce que l'un veut passer les vacances à la mer, l'autre à la montagne.

L'exemple de la jeune fille qui rentre tard chez elle met en évidence deux autres différences qui permettent de distinguer les deux activités. Premièrement, dans un jeu de rôles, les participants peuvent mieux utiliser leur imagination; le jeu de rôles laisse plus de place à l'affectif et à l'expressivité que la simulation. Comme le dit F. DEBYSER (1978, p. 70): "L'exercice qui se prêtera le mieux à cette mobilisation des moyens expressifs sera alors non plus la simulation mais le jeu de rôles." Deuxièmement, la simulation est compatible avec un enseignement de type fonctionnel — notionnel car elle tient compte de la situation socio-culturelle et de l'âge des personnages. Comme le disent J.M. CARE et K. TALARICO (1983, p. 197):

> "La simulation est relativement statique, figée, l'improvisation y a peu de place (ou alors elle bascule dans le jeu de rôle), les productions langagières attendues sont toujours des discours fortement stéréotypés, émaillés parfois de discours de spécialité. La simulation doit permettre de réinventer, de reproduire, aussi fidèlement que possible un pan de la réalité. Ses objectifs sont donc parfaitement compatibles avec un enseignement de type notionnel."

Certains méthodologues préfèrent la simulation au jeu de rôles parce qu'elle est plus facile à programmer et parce qu'elle est plus sécurisante pour l'enseignant comme pour l'apprenant. Elle constitue "une option de prudence" car elle permet à l'apprenant d'essayer de se rapprocher consciemment d'un modèle et non à improviser dans une situation de communication "sauvage" comme dans un jeu de rôles.

La simulation apparaît aussi à certains comme une option de prudence car il y a des dangers inhérents au jeu de rôles. Celui — ci se trouve en quelque sorte à la frontière entre la pédagogie et la thérapeutique. Le jeu de rôles a un statut hybride et il peut être considéré comme la version pédagogique du psychodrame. Le professeur de langue doit donc veiller à ce que le jeu de rôles ne se dégénère pas en psychodrame:

> "Plus dangereux et plus subtils sont les glissements psychodramatiques. L'émotion est trop forte, on est allé trop loin; le drame n'est plus joué, il se vit. Il va falloir revenir en arrière, s'expliquer, trouver ailleurs que dans le jeu des raisons, un début de justification ... travail qui n'a plus rien de pédagogique." (ibid., 1983, p. 203).

En effet, le psychodrame est thérapeutique et analytique et il doit être pratiqué par des psychanalystes qui sont capables d'en maîtriser les effets. Par contre, le jeu de rôles est pédagogique et le professeur de langue ne peut pas se permettre de voir se développer des situations qui lui échappent. Malheureusement, la frontière entre le jeu de rôles et le psychodrame est assez floue et on risque de passer de l'un à l'autre si l'on ne prend pas un certain nombre de précautions, comme par exemple:
— Etre disponible pour évaluer l'intensité des émotions. Intervenir si la tension monte trop vite ou si l'émotion n'est pas contrôlée.
— Le professeu peut intégrer des rôles de médiateurs à la situation de départ.
— Intervenir indirectement pour désamorcer un conflit trop violent en donnant des consignes à l'oreille d'un des participants pour qu'il modifie son jeu ou change de comportement.
— Arrêter le jeu si l'on perd le contrôle et expliquer les raisons d'une telle décision aux participants.

Il n'est pas difficile de comprendre ce risque (la dégénération en psychodrame) dans le cas du jeu de rôles car lors d'une telle activité on propose aux élèves une situation de préférence conflictuelle que les élèves doivent jouer sans préparation. Cette caractéristique du jeu de rôles (la présence d'une situation de conflit) contribue à créer des tensions et des émotions fortes, d'où la dégénération possible de l'activité en psychodrame. Cette caractéristique du jeu de rôles est décrite par les auteurs de la méthode *En effeuillant la marguerite* (Livre du professeur, p. 6):

> "Jeux de rôles: Il s'agit de jouer des scènes improvisées à partir d'une situation initiale définie avec les élèves. Le déroulement de ces exercices n'est pas planifié dans le détail comme dans un exercice de dramatisation ou de simulation. Le jeu de rôle ne doit pas suivre un canevas préétabli, il doit laisser la plus grande liberté aux participants. On se contentera d'esquisser la situation initiale en prenant soin de la choisir de telle sorte qu'elle contienne un élément de déséquilibre, d'ambiguité, un quiproquo ou un conflit."

La simulation et le jeu de rôles se distinguent aussi par leur déroulement. Dans la simulation la démarche à suivre est en cinq temps: (i) se déterminer les objectivs, (ii) réunir les données, (iii) construire un modèle, (iv) fabriquer le matériel, (v) évaluer. La simulation exige donc une préparation minutieuse et un travail de mise en place. Dans le cas d'un jeu de rôles, la construction des rôles implique aussi un certain nombre d'activités préparatoires mais on se limite à donner le minimum (identification des rôles, relations entretenues, comportements). De plus, toute une classe peut participer à une simulation si on travaille en sous — groupes mais une classe entière peut difficilement participer à un jeu de rôles.

Cependant, les apprenants qui ne participent pas activement ne doivent pas être des spectateurs passifs. Par conséquent, il faut leur donner un rôle de témoins actifs en leur distribuant des tâches précises d'observation et d'écoute: relever les fautes de langue, noter tous les moyens linguistiques utilisés pour exprimer un acte de parole donné etc.

Comme la simulation, le jeu de rôles peut avoir des objectifs différents en fonction du niveau des étudiants et des possibilités d'insertion dans le programme. Le jeu de rôles peut même être utilisé comme une procédure d'évaluation car il montre surtout si les apprenants sont capables, en situation d'improvisation, de réutiliser de façon adéquate les acquis antérieurs. Il met aussi en évidence les moyens linguistiques qui manquent encore chez les apprenants. Comme le disent J.M. CARE et K. TALARICO (1983, p. 168):

> "Le jeu de rôle, dans sa version spontanéiste, sans préparation initiale, plutôt sera un moyen de contrôle d'évaluation des acquisitions antérieures."

Cet aspect du jeu de rôles cause souvent des problèmes car on risque de proposer aux apprenants des canevas relativement contraignants (ce qui est peu compatible avec la recherche de la spontanéité et de l'improvisation) afin de faire coïncider le contenu linguistique du programme scolaire avec la situation du jeu.

On peut organiser des séances de simulation ou de jeu de rôles à des moments différents du processus d'apprentissage. Ces activités peuvent être insérées dans une méthode ou dans un programme. Elles peuvent être concues comme l'aboutissement d'une lecon mais elles peuvent aussi se trouver au centre d'une unité didactique. Dans un tel cas, le jeu s'alterne avec des phases de préparation et d'évaluation.

Une autre différence qui existe entre les deux activités concerne l'espace où se déroule le jeu. Lorsqu'on utilise des techniques de simulation on travaille normalement en sous — groupes, ce qui n'est pas le cas dans un jeu de rôles. En jeu de rôles, il n' y a pas de scène ou d'estrade mais simplement un espace circulaire au centre de la salle de classe. Cet espace peut être délimité par les tables et les chaises des apprenants. De plus, il ne faut pas confondre la simulation et le jeu de rôles avec la dramatisation des méthodes audio — visuelles. Une telle dramatisation est plutôt, selon le mot de Sophie MOIRAND (1974, p. 15), une "théâtralisation" car il s'agit d'apprendre un rôle. La dramatisation n'est qu'une mise scène du dialogue de départ appris plus ou moins par coeur et rejoué avec quelques légères modifications.

Enfin, il ne faut pas oublier que la simulation et le jeu de rôles ne constituent pas à eux seuls un cours d'apprentissage de langues étrangères. Les deux activités ne sont que les techniques d'animation de classe qui, malgré tous leurs avantages, ne sont que des outils qui doivent s'inscrire dans un ensemble cohérent.

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Readability of Science Textbooks in Forms 1 and 2

Abstract

Alexandra Sollars

The readability of science textbooks, used by pupils attending Forms 1 and 2 in state schools, was investigated. According to the Flesch Reading Ease formula and the Fry readability graph, This is Science 1 *had a mean reading age of 12.7 years (σ = 1.47) and 11.5 years (σ = 1.54) respectively, whereas* This is Science 2 *had a mean reading age of 12.6 years (σ = 1.2) and 11.6 years (σ = 1.70).*

Seven versions of two close tests were administered to a sample of 316 Form 1 girls from four area schools and 397 Form 2 girls from the same area schools and a Junior Lyceum. Two methods of scoring were used. It was found that the pupils may understand This is Science 1 *if teacher's help is available.* This is Science 2 *was too difficult for pupils of average and below-average ability but within the capabilities of high-ability pupils.*

PURPOSE OF THE STUDY

Many research studies suggest that science texts provide serious problems of comprehension and readability for pupils (Hart, 1980; Walker, 1980; Reid *et al*, 1983). Readability — the quality of the text which determines understanding — depends on different factors. Vocabulary is very important in determining the difficulty of a science textbook. Not only is the usual vocabulary used difficult, but the introduction of unfamiliar scientific and technical words together with the use of complex sentence structures creates further problems. A pupil may also find difficulties because of his mood, interest and intelligence, the type of print and the page layout (Carré, 1981). These findings have instigated the examination in some detail of the readability of the pupils' science textbooks used in Forms 1 and 2 in Maltese state schools.

The Science Textbooks

Pupils in the first two years of their secondary education follow an Integrated Science course. All state schools make use of the same textbooks — *This is Science 1* (Dobson, 1981a) and *This is Science 2* (Dobson, 1981b). According to the author,

> "the pupils' books are quite short and written in a vocabulary and with a syntax that should make them useful to all but the remedial reader and it is hoped that even these pupils can be helped in their science lessons by the diagrams and experiment instructions".
>
> *(Dobson, 1980, p. 1)*

Further on, he states that "*This is Science* caters for the pupils of average and below-average reading ability" (p. 11) who, however, can understand science. The author also asserts that the aim of the science course has been to produce "attractive book(s) that encourage pupils to read — for pleasure, for background information, [and] for help in carrying out experiments" (p. 2).

It should be noted that one of the reasons for the selection of these books for Maltese pupils was that the language level was easier compared to the previous texts, *Science for the 70s* Books 1 and 2, as the syntax and vocabulary used were simpler. Hence it was expected that the majority of pupils would understand the books (Ventura, 1985).

Maltese Pupils' Reading Ability

Since the science course is in English and examinations are set in this language, and as readability involves a measure of the match between the text and its readers' ability, determining the reading ability of the Maltese pupils in the second language becomes very important.

Unfortunately, no recent reliable measures of the pupils' reading ability are available. According to Ventura (1985), the only recorded standardised reading ability test was administered to Maltese pupils in 1968. Officials from the Education Department constructed an English Word Recognition Test of 110 words selected from two word recognition tests by Burt and Schonell for which British pupils' norms were known. The test was set to a representative sample of 753 Maltese pupils, between the ages of seven and eleven years, in both private and state schools (Falzon, 1968). The results of the test showed that the reading age of seven-year-old Maltese pupils was about a year-and-a-half lower than that of the British counterparts. This gap increased with age and, on entering a secondary school, an 11-year-old Maltese had a reading age equivalent to an 8-year-old British pupil. When the same word recognition test was used in 1979 in the lower streams of twelve secondary schools, the results showed that boys of median age 12 years 2 months had a reading age corresponding to that of an English 7-year-old.

Girls of a median age 12 years 1 month had a reading age which corresponded to a British pupil of seven-and-a-half years (Ventura, 1985).

The only data available on the pupils's level of understanding of the science textbooks is from an unpublished study by Ventura (1985) who administered a cloze test to 152 Form 2 pupils in the second best streams of five area schools (3 boys' and 2 girls' schools). In the cloze test, a passage from the pupils' books was used. The results showed that the sample of pupils chosen was finding *This is Science 2* too difficult. But as the sample was not a representative one, the results obtained may not have been a true picture of the actual situation.

Due to the meagre data on Maltese pupils's reading ability in general, and on the readability of the textbooks of the *This is Science* course in particular, it was decided to investigate further the readability of the science textbooks in Forms 1 and 2 and indirectly to obtain an indication of the female pupils' ability to read and understand simple texts in English.

Main Purposes of this Study

This study is designed:

(a) to check the reading age of *This is Science 2* by applying readability formulae to passages chosen at random from all the possible chapters in the textbooks. The readability formulae applied to the texts were the Flesch Reading Ease formula and the Fry Readability graph;

(b) to check whether Maltese pupils are able to understand these textbooks. For this purpose it was decided to administer cloze tests because several research studies discussed below favour this method, they are easy to prepare and straightforward to score. Also, cloze test scores are comparable to results from readability formulae.

Readability of Textbooks

What is Readability?

Readability is not a simple measure of some property of the written material but it is a function of characteristics of the text, the readers and the interactions between readers and text. According to Harrison (1980), those aspects of a text which make it easy for a reader to understand what is being conveyed by the author include: legibility of print, illustration and colour, vocabulary, conceptual difficulty, syntax and organisation.

The person's understanding of a book is not only determined by the factors related to the text itself, but also by the individual's own knowledge and abilities. His level of familiarity with written and oral language structures and vocabulary influence the degree of comprehension. This factor applies very much to Maltese students since English is their second language. Interest and motivation are also vital in reading, especially with low ability students.

Measuring Readability

Because science lessons involve a lot of practical work, demonstrations, blackboard work and clearing up before the end of the lesson, and a packed syllabus has to be covered for the exam, teachers tend to use the textbook as an aspect of homework. The findings of the *Effective Use of Reading Project* (Lunzer and Gardner, 1979) suggest that in spite of the potential value of reading for the individual, science teachers do not rate it highly as a method of teaching and in fact use it very little. A book, which is to be used without the help of the teacher, can only be effective if it is appropriate in its level of difficulty and satisfying to the reader. Not only textbooks, but even books for wider reading, reference and research need to be suitable for a given age group and a range of pupil characteristics (Hart, 1980).

Even if the teacher has a knowledge of the reading ability of each pupil, deciding whether a text is suitable or not is difficult. Objective methods of predicting text difficulty are therefore required to help the teacher. Foremost among these methods one finds readability formulae, charts and graphs or cloze tests.

Readability Formulae

Readability formulae, charts and graphs are based on counts of language variables in a piece of writing in order to obtain a measure of the probable difficulty of the text for readers. They are predictive measures because no participation by readers is required (Klare, 1974-75). The most commonly used formulae assume that the two most important determinants of text difficulty are vocabulary and sentence structure. Measures of word frequency, word length (such as average number of syllables per word) and sentence length can predict the difficulty of a text. However a correlation does not imply a causal relationship and formulae can be "fooled" by specific texts such as poems (Harrison, 1980). Irrespective of some possible drawbacks, formulae are often made use of. Five of the more popular ones are the Dale-Chall Formula, the Flesch Formula, the Lorge Formula, the Mugford Readability Chart and the Fry Readability Graph. The Flesch formula and the Fry graph have been applied to the science textbooks *This is Science 1* and *This is Science 2* and will be discussed later on.

Cloze Tests

The term "cloze procedure" was first used by Wilson Taylor in 1953 to describe a new way of testing the readers' comprehension. He derived the word "cloze" from "closure" in Gestalt

psychology, the tendency by persons to close or complete an incomplete circle or any other familiar object (Oller, 1979; Wainman, 1979). In the cloze technique blanks are placed in prose where words in the text have been omitted and examinees are asked to insert the word which seems most suitable in each blank space. The proportion of correctly-guessed words gives an indication of the extent to which the reader has understood the passage.

Unlike any formula, cloze scores are sensitive to the variations within a specific group. Variations can arise because of the group's background knowledge of the subject-matter of the test, or the group's overall level of linguistic comptence if it happens to differ from the norm. Unlike most readability formulae, cloze tests are not "fooled" by simple long sentences or by short but unfamiliar words. The cloze procedure is an important method of finding out how well a specific group can understand a book. Oller (1979) quotes Klare, Sinaiko and Storulow (1972) who point out that the average score of a group of subjects on a cloze test is an *actual* measure of readability whereas the formulae are means of *estimating* difficulty levels. The cloze procedure, which will be considered in more detail below, has been applied to two separate passages taken from the science textbooks in order to find out the pupils' level of comprehension.

Flesch Reading Ease Formula (1948)

The Flesch formula is one of the best-known and most widely used readability measures because of its high validity and reliability. Flesch chose a difficulty index which did not relate to age, but to an imaginary comprehension score out of 100: the lower the score, the more difficult is the passage. Flesch found that the two variables which correlated most highly with difficulty are the average number of syllables per word and sentence length. He incorporated these two variables in an equation which gives a reading ease score (Harrison, 1980, p. 72).[1] The reading ease score can be related to age levels by an arithmetical transformation.

Fry's Readability Graph (1977)

According to Fry, the purpose of his readability graph is "to aid teachers and editors to help children or adults read better by giving them material on the proper difficulty level" (Fry, 1977, p. 243). It is helpful because it is easy to work out and the readability index is represented visually on a graph. The graph can be applied from grade one (age 6) up through the college years (18 to 22 years). The two variables entered in the graph are the number of syllables in a continuous passage of 100 words, and the number of sentences in that passage. The information is plotted on the graph and the area where the two lines intersect gives the approximate American grade level. The UK reading level is found by adding five to grade level.

It can be assumed that readability formulae are quite reliable because they correlate fairly well with each other. Validity can be found by correlations between formulae, comprehension scores, cloze scores, oral reading errors, observer judgement and with written passages of known difficulty. Fry's readability graph gives a high correlation coefficient, 0.81 with cloze rankings (Bormuth levels). It also correlated 0.95 with the Flesch and 0.85 with the Dale-Chall formulae (Fry, 1977).

Cloze Procedure

Many researchers have shown that the cloze procedure gives more reliable information about the difficulty levels of samples of text than any other method yet devised, and the technique works much better than the readability formulae (Oller, 1979). This is because the cloze procedure not only measures the difficulty of the passage itself but also measures what a reader brings to the passage in terms of content knowledge. Construction of cloze tests will now be briefly discussed.

Selecting the Passage

One or two passages about 250 words long are selected at random, however this may not be possible if the text is too brief or continuous prose is kept short.

Deletion Procedure

Deletion usually takes place at equal intervals, say every fifth, seventh or tenth word. This procedure is called the fixed-ratio method. By this method, the type of words which are deleted are not pre-calculated. Wainman (1979) showed that the cloze method of mechanical deletion produces results for second-language learners as good as the results obtained by deleting content words. Such tests are easier to prepare and a wider variety of language categories can be studied.

A sentence of two at the beginning of the text can be left intact to serve as a brief lead in before the deletions begin. Some researchers prefer leaving a few undeleted sentences as lead out at the end of the passage. The minimum number of deletions for a quite reliable cloze test is 35 (Harrison, 1980).

Fifth-word deletion has been the most widely used rate in research work, but it may not be the best for the classroom. Klare *et al.* (1972) suggested that the seventh-word rather than the fifth-word deletion is better for readers who are quite weak or

if the passage is likely to be found difficult (Harrison, 1980).

The best estimates of readability may be obtained by "clozing" every word in sample texts (Oller, 1979). That is, if the text is 250 words long, with every seventh word deleted, it is possible to construct seven versions of the text with 35 blanks each, by deleting the first, eighth, fifteenth . . . and so on for the first version; the second, ninth, sixteenth . . . for the second version; and so on until the seventh, fourteenth, twenty-first . . . are deleted for the seventh and last version. In this way, the cloze test measures the difficulty of every single word, phrase and sentence in the passage.

Each time a word is omitted, a standard length of blank is used. The space commonly left is twelve or fifteen letter-spaces, depending on the size of the type.

Scoring Procedures

Two types of scoring techniques are the exact word method and the contextual appropriate method. By the *exact word method*, a word is scored correct only if it is the exact one which appears in the original passage. This may be considered too rigid, especially when alternatives can be just as good or better than the word in the text. However, verbatim scoring is simpler, faster and more reliable and valid than any other method (Harrison, 1980).

In the *contextual appropriate method*, any word which fully fits the total surrounding context is considered correct. This method relies on a certain degree of subjective judgement by the person correcting the texts. However high correlations are observed between scores generated on this basis and scores based on the exact word technique (Oller, 1979). Researchers who have used the cloze method as a measure of second-language proficiency often preferred scoring by the contextually appropriate method (Oller, 1972; Wainman, 1979).

Criteria to Assess Understanding

Once the cloze tests have been corrected, it is important to interpret the results obtained and to know what the scores mean. Different researchers offer different suggestions (Bormuth, 1968; Oller, 1979; Harrison, 1980).

Anderson (1971), quoted by Oller (1979), suggests the following interpretations for the cloze scores obtained by non-native students and these criteria are used in this study. A cloze score of 53% or above (by the exact word method) corresponds to the *independent level* of reading. Passages corresponding to this level are said to be suitable for the student's study in an unsupported context. A score between 44% and 53% is, according to Anderson, appropriate at the *instructional level*. Passages or textbooks at this level can be effective if they are read in the presence of a teacher who can define, explain, simplify and illustrate with reference to the pupils' experience. If the score is less than 44%, it falls in the *frustration level* and this implies that the texts are too difficult and the reader cannot learn much from the book without a great deal of specific help.

Research Methodology

Selection of Samples from the Pupils' Texts

A minimum of three samples of 100 words each were chosen at random from every chapter. Thus any change in the level of difficulty in the same chapter was catered for. Each passage chosen had to deal with one specific idea. However this was not always feasible as certain chapters did not have passages which were long enough. In all forty-seven 100-word samples, twenty-four from *This is Science 1* and twenty-three from *This is Science 2*, were subjected to the analysis required by the Flesch formula and the Fry Readability graph.

Using the seventh-word deletion for the cloze tests and having a minimum of thirty-five deleted words in every version, meant that the sections had to be at least 245 words long. It was thought best to use 7th-word deletion rather than 5th-word deletion since the cloze tests were to be given to second language speakers. Two or three sentences at the beginning of the cloze test were to serve as a brief lead in before deletions commenced. Every deleted word was replaced by a blank 15-typed spaces wide.

The section entitled "Looking at Animals" was selected from the second chapter of *This is Science 1*. The author of the books says that this section "is for reading by the pupils. It could be set as 'quiet work' or as homework . . ." (Dobson, 1980, p. 57). This section was one of the very few passages of continuous prose of suitable length (280 words).

The second cloze test was prepared from a section of the sixth chapter of *This is Science 2*. The section is entitled "Energy from the Sun". The cloze test was 282 words long which included the first two sentences (37 words) as a brief lead in. As with the first cloze test seven versions were set and every deleted word was replaced by a blank 15-spaces wide.

The Sample of Students

Four girls' area schools with Forms 1 and 2 were chosen out of the nine available ones. The second cloze test was also carried out at a girls' Junior Lyceum.

The first cloze test was distributed to 316 Form 1 girls of average age 12 years 1 month. The top three or four streams were chosen, depending on the school population and the Headmistresses' opinion on the students' level of understanding of English. Table I shows the total number of Form 1 girls in the different streams.

Research Findings

Results of Readability Formulae

The mean reading age for *This is Science 1* is 11-and-a-half years (σ = 1.54) according to the Flesch Reading ease formula and 12 years 8 months (σ = 1.47) according to the Fry readability graph. According to the Fry graph the easiest passage has a reading age of 8 years and the most difficult of 13 years. The Flesch formula gives a wider range with the easiest passage having a reading age of 10 years 5 months and the most difficult of 16 years 4 months. Slight discrepancies between the two readability formulae are to be expected, for although they show very high correlation, no two formulae show perfect correlation. The most frequent reading age is 13 years, which is higher than the average age of girls in Form 1.

Test	School	Numbers of pupils				Total
		Stream A	Stream B	Stream C	Stream D	
Cloze I	Area	102	96	85	33	316
Cloze II	Area	89	84	80	39	219
Cloze II	JL	25	25	27	26	105

Table I - Sample of girls in Forms 1 and 2 according to school and stream.

In order to keep certain extraneous variables - such as intelligence, motivation and attitude towards science - constant, the girls selected for the first cloze test also participated in the second cloze test a year later when they were in Form 2. Due to circumstances beyond control, it was impossible to have the same number in Forms 1 and 2, because of transfers to the Junior Lyceums or other schools, promotions or demotions to a different stream or absenteeism. The girls' average age was 13 years. The second cloze test was also applied to 105 Form 2 girls in four streams of a Junior Lyceum. Their average age was also 13 years. Table I shows the total number of Form 2 girls in the different schools and streams.[2]

Application of the Cloze Tests

Copies of the seven versions were distributed as evenly as possible to the pupils in the four chosen area schools and Junior Lyceum. Every pair of girls was given the same version in order to prevent any copying. The first cloze test was held between June and July 1984 whereas the second cloze test was held the following year in June 1985. The pupils were given about 30 minutes to complete the cloze test. It was more than ample time, and most girls - especially the weaker ones - handed in the cloze test before the bell rang.

Since the cloze test was given to second-language speakers, it was decided to score the versions both by the exact word method and the method for contextual appropriateness. In the second method of scoring, any insertion that fully fit the surrounding context was considered correct.

The mean reading age for *This is Science 2* is 11 years 7 months (σ= 1.70) according to the Flesch reading ease formula and 12 years 7 months (σ = 1.16) according to the Fry readability graph. The easiest passage has a reading age of 8 years and 10 years 6 months according to the Fry graph and the Flesch formula respectively. The most difficult sample has a reading of 14 years and 14 years 11 months, depending on the readability formula applied. The most frequent reading age of the passages is 13 years, which agrees with the girls' mean age in Form 2.

Wide divergences from the average exist even within the same chapter. The average variation in reading age in the chapters of *This is Science 1* is 2.5 years with the maximum being a 5-year discrepancy in reading age level (by Fry graph) in Chapter 3. The average difference in reading age of *This is Science 2* is 2 years, although passages taken from the first chapter show a variation of 5 years (by Fry graph).

This implies that whereas the author of the science course (Dobson, 1980) says that the books cater for the pupil of average and below-average reading ability and that they have been written in a vocabulary and with a syntax suitable for all, the formulae applied in this study indicate otherwise. Unless teacher support and guidance are available, an average 12-year-old would find it extremely difficult to understand passages suitable for 16-year-olds.

Readability formulae give the aproximate reading age level for a person whose first language is English. Since formulae are predictive measures of readability of texts, they do not take into account the readers' background and therefore they do not distinguish between a first-language and a second-language speaker. According to both the Fry graph and the Flesch formula, *This is Science* has a suitable average reading age level for UK readers. However, considering the results quoted previously about the Maltese pupils' reading ability (Ventura, 1985), both Book I and Book 2 are too difficult for Maltese pupils.

Results of Cloze Test I (Area Schools)

According to the readability formulae, the passage chosen for cloze test I has a reading age level between 12.3 and 13.2 years (by the Flesch formula) and 11 and 12 years (by the Fry graph). The global results, using two methods of scoring, are shown in Table II.[3]

When the passages were corrected by the exact word method, the global score obtained in cloze test I was 12.5 (maximum score 35). The easiest version was the fifth, with an average score of 15.0, and the most difficult proved to be the firsdt of 15.0, and the most difficult proved to be the first version with a very low mean score of 9.2.

The scores of cloze test I range from 27.4% to 42.9%, with an average equivalent ot 36.1%. The percentage marks of four out of seven versions fall with the 35% to 40% criterion, which - according to Bormuth - might be too low and readers show signs of frustration and inattention when faced with such difficult texts. Children scoring below 40% will not learn much from a book unless a lot of help is available. The marks obtained in the cloze test are indicating that girls attending the area schools are facing serious problems which can only cause low interest and motivation in the subject.

Verbatim scoring may be considered too strict a method for second language speakers and therefore the cloze tests were scored by a second method. Words which fit in the context written were also marked as correct. The global score obtained in cloze test I by the appropriate word method was 14.2. The easiest version remained version 5, with an average score of 16.1. The most difficult versions were the first and seventh, both giving an average score of 11.7.

The percentage marks of cloze test I range from 34.4% to 46%, with an average equivalent to 40.7%. The percentage marks of four versions fall in the 40% to 45% criterion. Bormuth (1968) suggests that scores equivalent to 44% represent the instructional level of reading. Harrison (1980) considers the 40% - 45% criterion as the most important in a classroom situation because very high percentages in cloze tests on school texts are not very common. Marks falling within this range therefore indicate that the text is suitable for studying only if help and advice are readily available.

The results of cloze test I indicate that girls in the area schools are encountering severe problems which can lead to a low level of understanding if the teacher in class does nothing to help them internalise the scientific concepts and comprehend the language used in the textbook. Certainly, if pupils are asked to use the textbooks on their own, for example by setting them reading tasks for homework, the text is too difficult for them.

Cloze Test/ School	Scoring by the Exact Word Method		Scoring for Contextual Appropriateness	
	×	% mark	×	% mark
Cloze Test I (Area Schools)	12.5	36.1	14.2	40.7
Cloze Test II (Area Schools)	8.5	24.3	11.3	32.3
Cloze Test II (Junior Lyceum)	17.1	48.9	22.5	64.3

Table II - Global scores obtained in the Cloze Tests using two methods of scoring.

Results of Cloze Test II (Area Schools)

According to the Fry graph and the Flesch formula, the passage chosen for cloze test II has a reading age between 12 and 14 years and 12.8 and 14.9 years respectively. Therefore the readability formulae predict a passage beyond the reading age of an average 13-year-old pupil. As can be seen from Table II, the global score obtained in this cloze test was 8.5 (maximum score 35) when the passages were corrected by the exact word method. The easiest version was the first, with an average score of 10.8, whereas the most difficult was the fourth, with an average score of 6.4.

The percentage mark of all the seven versions of this cloze test is below 31%, with the lowest being equivalent to 18.3%. These percentage marks fall well below 35%. Bormuth considers such a percentage too low for any learning to take place. The passage used in the cloze test proved to be too difficult for the girls in the area schools. The results confirm the estimations given by the readability formulae and they indicate that the language is causing a formidable barrier for science to be comprehended by the girls in the study.

When cloze test II was scored for contextual appropriateness, the global score increased slightly to 11.3. The easiest version was the third, with a mean score of 14.0, while the most difficult version remained the fourth, with an average score of 8.9. Five out of the seven versions remained below 35% and only the third version increased to 40.1%. Although there was an 8 percent increase in the mark, the passage remained at the "frustrational" level and was therefore beyond the pupils' ability.

Result of Cloze Test II (Junior Lyceum)

The scores achieved in the cloze test by Junior Lyceum girls were higher than those obtained by the girls attending area schools. The global score was 17.1 when verbatim scoring was used. The girls found the fourth version, with an average score of 15.6, as the least facile, and the sixth version, with a mean score of 18.7 as the easiest.

All the versions obtained a percentage mark greater than 45%, with the highest being equal to 53.5%. These marks are beyond the 40%-45% criterion but slightly belwo the 55%-60% criterion. The 40% to 45% score range indicates that the text is suitable for study at the instructional level. As expected girls of a higher ability have a better knowledge of English and are capable of understanding the passage, even though the readability formulae predicted a higher reading age level.

The girls in the study have a wider vocabulary range than those in area schools and this is evident from the scores obtained when the cloze tests were marked using the appropriate word technique. The average score increased to 22.5. The easiest version was the sixth, with an average of 25.1, whereas the first version obtained a mean of 19.8. The percentage marks obtained in the cloze test by the second method of scoring, showed a 10% increase in all the versions, with the sixth version obtaining a very high 71.8%. The marks of all seven versions were highr than 55%. Such percentages indicate that even though the pupils did not write the author's words, they were able to supply an alternative which fitted the context. This result shows that these girls can comprehend such and similar texts with little or no help from the teacher.

Reliability and Validity

The reliability of the cloze procedure was estimated by the Kuder-Richardson formula 20 (KR-20). The results were considered separately as cloze test I (area schools), cloze test II (area schools) and cloze test II (Junior Lyceum). Scores obtained by the exact word method were applied such that each item was either correct or wrong. Reliability of cloze test II (Junior Lyceum) was also calculated on the scores obtained by the method of contextual appropriateness. As each cloze test had seven versions, reliability of every version was determined because of possible fluctuations within the same cloze test.

The cloze test on the selected passage from *This is Science 1* shows a very high reliability, $r = 0.851$ (range $r = 0.811$ to $r = 0.919$). The high reliability coefficient indicates that the cloze test is consistently measuring the readability of the text and that the results obtained by the girls in Form I are a true picture of the situation in the area schools.

The reliability of the cloze test on the passage chosen from *This is Science 2*, for girls attending both the area schools and the Junior Lyceum, is lower than that of cloze test I. The scores of cloze test II (area schools) gave an average reliability of 0.733 (r ranging from a low 0.599 to a very high 0.913). The low reliability could have resulted from factors such as lack of interest, low motivation and boredom because the cloze test proved to be very difficult to comprehend.

Assuming lack of interest is not a problem in the case of girls attending the Junior Lyceum - especially the ones in the top stream - the low reliability coefficient ($r = 0\text{-}689$) obtained in cloze test II could have been due to the homogeneity of the group. Ebel (1965) says that a group having a wide range of ability will give a higher reliability coefficient than one which is more homogeneous in ability. Sample number could also have influenced reliability.

Reliability coefficient increased to 0.812 when scores obtained by the contextually appropriate method were used in item analysis. With the exception of one version, all the others gave a higher and more realistic reliability. It seems that with second language speakers, the contextually appropriate method is a better way of testing the pupils' level of comprehension of a text.

Concurrent validity of the cloze tests was determined as a correlation coefficient by finding the extent of relation between performance in the cloze test and annual examination results in English and Science. Cloze tests I and II showed a higher correlation with English ($r = 0.717$ and $r = 0.665$) than with Science ($r = 0.656$ and $r = 0.622$). The decrease in validity of cloze test II may have been due to the sample itself, who found this cloze test beyond their ability and hence showed low motivation and interest.

This study has shown that the cloze procedure can be a reliable and valid method to investigate the readability of a text and the pupils' level of comprehension of English. The results were corroborated by a different study carried out on a small scale in which Form 2 pupils in an area schol and a Junior Lyceum had to explain certain scientific and non-scientific words from their science textbook.

Conclusions and Recommendations

The potential value of a book in the classroom is determined by at least three groups of factors: factors associated with the text itself such as the extent to which it is written in a simple and clear way, and legibly and attractively produced; the ability of the children to read and understand; and how the teacher presents the text within a lesson (Harrison, 1979). This study has shown that, although the author of *This is Science* says that the books are aimed for pupils of average and below-average ability, it appears that Maltese female pupils in area secondary schools are facing serious problems because of the language used. The texts are presenting difficulties which are preventing the pupils from understanding and learning science from them. As the sample in the study are all girls, it would be interesting to find out if boys too are having these problems and whether sex differences exist.

Science teachers may be well aware of the limitations language puts on teaching and learning of science. However, they need to be more alert to the problems caused by these and other books, worksheets and handouts. When the pupils have to tackle work on their own, they will not show any progress unless they can fully comprehend what they are asked to do. Also, if the pupils' intrinsic motivation is low, providing books which have a high level of prose difficulty is more likely to lead to non-comprehension and frustration. If teachers wish to encourage a greater use of printed sources in science, easier texts must be used to contribute to independent learning.

A suggestion which could be followed is to reduce the emphasis made on English. At present, English is used in textbooks, worksheets and national examinations. However, pupils of below-average ability find this too demanding. Perhaps, it would be better if the science curriculum for the less able pupils - including textbooks, handouts and setting of exams - is planned and taught in Maltese. Having a textbook written in Maltese by local authors could cater for pupils in the secondary schools because local examples and situations could be included together with examples related to or present in our island. Vocabulary, sentence structure and other factors which make a book readable should be taken into consideration. This may mean a lot of preparation and a change in approach. However, it may also be the solution to the problems that are being faced by the less intelligent pupils. After all science teachers should primarily be concerned with the development of scientific concepts rather than with pupils' language difficulties.

Note

I would like to thank the Heads, teachers and pupils of these girls' secondary schools - B'Kara (Ta' Paris), Hamrun (Samra), Sliema, Qrendi and Mriehel Junior Lyceum - whose cooperation was essential for the successful completion of this study.

Notes and References

1. Reading Ease Score = 206.835 - (0.846 × SYLLS/100W) - (1.015 + WDS/SEN) where SYLLS/100W = average number of syllables per 100 words
   WDS/SEN = average number of words per sentence.
2. For further details on the sample number according to school and the number of respondents for each version, refer to: Sollars, A., - *Readability of Science Textbooks in Forms I and 2*, pp. 39-41.
3. For a detailed picture of the results obtained in the separate versions of each cloze test, refer to: Sollars, A. (*op. cit.*), pp. 58-68.

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(continued on page 28)

Sex Differences in Measurement

Adrianne Brockdorff

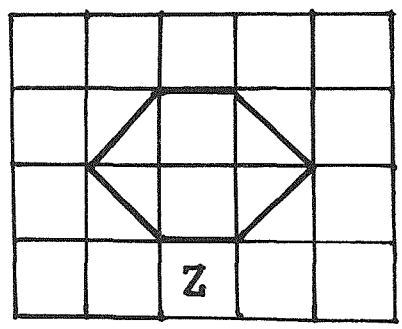
In a recent study, an attempt was made to assess secondary school children's understanding of the concepts of measurement, in one and two dimensions. Since the concepts studied involve spatial ability, an area in which males supposedly outperform females, the results were also analysed to study any differences in the understanding of the concepts between the sexes.

The study was carried out by means of a test paper on a particular section of the secondary school population — Junior Lyceum students during March-May, 1985. Therefore, although the results might shed light on possible differences in other sections of the secondary school population, no such generalizations are possible.

The test paper was adapted from the Chelsea Diagnostic Mathematics Test on Measurement[1] and consisted of 18 questions, with a total of 37 separate items. The first six questions dealt with length whilst the rest dealt with the topics of area and perimeter. Comparing the test paper with the secondary school syllabus one finds that most of the topics dealt with in the test would have been studied by Form 1, if not by Year 6. The only difficulty, therefore, with answering the test paper was that the questions were not presented in the usual orthodox fashion which school children are acquainted with. Rather, the questions were worded in such a way that they examine the actual concepts and not the students' training at answering questions mechanically.

Below is an example of an item from the test.

This 6-sided figure Z is drawn on *centimetre square* paper (that is the squares have sides of 1 cm).



Draw a line under the correct answer:

The distance all round the edge of Z is:

6 cm more than 6 cm less than 6 cm you cannot tell

The total sample of students studied involved 473 children, that is 12.7% of the whole Junior Lyceum population at the time. 232 girls were randomly chosen from the Blata l-Bajda Junior Lyceum school while 241 boys were chosen from the Tal-Handaq Junior Lyceum. Since the study also aimed to investigate differences along secondary school years, children were chosen so as to make up approximately 50 students from each form in each of the two schools.

Of the 37 items studied, it was found that when comparing all the females with all the males, there were nine items in which males scored significantly better and three wherein females scored significantly better (therefore there were 25 items resulting in no difference, a clear indication of the overlap that exists between the sexes). The items in which the girls scored better involved non-standard units of length, and those in which the boys performed better involved comparing lengths of straight lines and curves, comparing area and perimeters of shapes and finding the area of triangles. However it was interesting to note that the differences between the sexes is more pronounced in the earlier years of secondary school. In fact as the table below shows, in the sample studied, girls in Form 5 performed significantly better than boys.

Table 1 Means tested for statistical significance in results between sexes

Form 1	SSD (B)
Form 2	SSD (B)
Form 3	SSD (B)
Form 4	No SSD
Form 5	SSD (G)

SSD (B) — boys' results are statistically significantly better than those of girls

SSD (G) — girls' results are statistically significantly better than those of boys.

Interestingly enough, of the nine items whose facility level was less than 50%, there was only one item which resulted in significant difference between the sexes. That is, in most of the more difficult items in the test, no statistically significant difference was found to be present between the sexes over all the ages in the sample.

Another interesting difference which emerged between the sexes was obtained when comparing their rate of learning in the topic concerned. The differences in means obtained by boys and girls at different levels were tested for statistical significance. The results are shown in the tables below.

Table 2 Boys' means tested for statistically significant difference along the years.

Differences in results which were statistically significant	Differences in results which were not statistically significant
Form 1 — Form 2	Form 2 — Form 3
Form 1 — Form 3	Form 3 — Form 4
Form 1 — Form 4	Form 4 — Form 5
Form 1 — Form 5	Form 2 — Form 4
Form 2 — Form 5	Form 3 — Form 5

Table 3 Girls' means tested for statistically significant difference along the years

Differences in results which were statistically significant	Differences in results which were not statistically significant
Form 1 — Form 2	Form 2 — Form 3
Form 3 — Form 4	
Form 4 — Form 5	
Form 1 — Form 3	
Form 1 — Form 4	
Form 1 — Form 5	
Form 2 — Form 4	
Form 2 — Form 5	
Form 3 — Form 5	

As shown, in the results for boys, it was found that half the differences in results were statistically significant and half the differences were not. In fact, where results of two successive years were compared, except for the differences in results between Form 1 and Form 2, the difference was not significant. There were two ways of explaining this — it could either imply that boys' maturity in this topic of measurement progresses at a slow pace such that from one year to another no significant difference is recorded; or else that the maximum level of understanding of the topic for the age group studied was reached by Form 2 and therefore very little improvement was likely to occur in subsequent years.

With regards to the results achieved by girls we find a very different situation. In this case, it is only the difference in results between Form 2 and Form 3 which are not statistically significant. Comparing the results of all other classes we find that the differences in results are statistically significant. Once again this can be explained in two ways. Either the rate of learning of girls in this particular topic is greater than that of boys such that the difference between one form and the next is statistically significant, or that girls do not achieve full understanding of the concepts early in their secondary school years but as they grow older their understanding of the topics of measurement increases. It could also be that these two processes are acting together.

How do the results of the test paper tie up with research carried out in Malta? A somewhat strange phenomenon seems to be occurring in our country. Through various research work it has been found that girls perform better than boys in mathematics at both primary and secondary level.[3]

Local researchers suggest that a reason for such a result, female superiority in maths, could be due to the effect of private schools. Both in the

(continued from page 26)

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preparatory classes and at secondary level the percentage of boys attending private schools is greater than that of girls. This could therefore explain the results obtained since private schools usually enrole the brighter pupils and therefore in government schools the brighter boys' population is reduced.

Another possible reason suggested, is that females are predominatly better than males at languages, and since maths tests are carried out in English, girls would be at an advantage. It could also be that females, possibly due to their upbringing, are more meticulous and conscientious in their work. This would therefore give them an advantage over males in their academic work.

How then can the results of this test paper be explained? Results, which show male superiority in the test from Forms 1 to 3 and female superiority in Form 5, in the topic of measurement, a topic in which males are thought to score better. Earlier on in this article, it was suggested that the reason could be due to a difference between the sexes in the rate of learning of the concepts involved. It has therefore been assumed up to now in this report that the difference in results was due to sex differences. Another possible explanation could be a changing sample, due to the changing role of the Junior Lyceum schools in our country. When these schools were first set up, in 1981/82 private schools were still preferred to these schools. However, over the past four-five years, due to parents' preoccupation about the future of private schools as well as due to the good results obtained by Junior Lyceum students, these schools have risen in popularity, therefore more students are enrolling in such schools.

This could therefore explain why among students in Form 5, which involve students who entered Junior Lyceum when these were just starting out, the females are superior to males in their performance in the topic of measurement. The students who have enrolled in the past four-five years, both males and females, probably are nor more representative of the brighter range of students in the entire population of secondary school children. Naturally, this other view of explaining the results, in terms of a changing sample, can only be examined in later studies when hopefully the students enrolled will then be more balanced in terms of female/male intellectual potential.

It might then be found, as is being found abroad[4], that when all extraneous factors are carefully controlled, fewer significant differences in mathematics achievement between females and males exist.

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I Programmi Televisivi Italiani: Un Sussidio da Sfruttare Fin dalle Elementari

Joseph Micallef

Per decenni, fino ad un tempo non lontano, più esattamente fino ai primi tre decenni di questo secolo, l'italiano si studiava a cominciare dalle classi più alte della scuola elementare. Naturalmente ciò succedeva perchè fino al 1933, quando la Costituzione del 1921 fu sospesa, le due lingue ufficiali delle isole maltesi erano appunto l'inglese e l'italiano:

> La lingua inglese essendo la lingua ufficiale dell'Impero Britannico, e la lingua italiana essendo la lingua stabilita di ogni registrazione nelle nostre corti di Malta, saranno le due lingue ufficiali di Malta (Lettere Patenti 14-4-1921, testo italiano).

La Costituzione del 1921 si espresse così sull'insegnamento di queste due lingue ufficiali:

> L'inglese e l'italiano saranno riconosciuti in Malta come lingue di cultura in pari grado all'Università, nelle scuole secondarie e nelle classi più alte delle scuole elementari come materia di studio (ibidem).

Comunque, pedagogicamente si sentiva che lo studio delle due lingue studiate simultaneamente avrebbe creato dei problemi e consequentemente la Costituzione dette la priorità allo studio di una delle due lingue:

> Allorchè le due lingue non possano senza scapito essere studiate allo stesso tempo, nello stabilire l'ordine di priorità in cui esse debbano essere insegnate, si dovrà aver riguardo, trattandosi delle scuole, al desiderio dei genitori, e trattandosi dell' Università, a quello degli studenti e all'utilità dell'insegnamento avendo di mira la futura professione dello scolaro (ibidem).

Ma una decina di anni più tardi, nel 1933, questa considerazione pedagogica, più il fatto che la lingua italiana cessò di essere lingua ufficiale, fu usata come scusa per sopprimere lo studio dell'italiano nelle scuole elementari.

Per molti anni non ci fu speranza che l'italiano ridiventasse materia scolastica ai livelli elementari: durante il ventennio seguente molti glottodidatti hanno continuato a sostenere la tesi che lo studio di una lingua straniera in età precoce danneggi lo sviluppo dell'intelligenza. Ma ad un tratto, verso la metà degli anni Cinquanta questa tesi cominciò a perdere terreno. Consequentemente ci fu agli inizi degli anni Sessanta, su iniziativa del ministro dell'Education dell'epoca, Antonio Paris, un tentativo di reintrodurre l'insegnamento dell'italiano nelle ultime classi della scuola elementare. Comunque questo tentativo fu "prematuro e destinato all'insuccesso" (Mangion, 'Maltanapoli', 7-12 1985, p. 5) e perciò il progetto fu subito accantonato.

Da quel periodo fino ad oggi non è stato mai ritentato un altro progetto per lo studio dell'italiano a livello elementare a Malta. Comunque, durante quel ventennio si sono verificate due cose che incoraggiano un ripensamento in quella direzione. Prima di tutto si è accertato attraverso molte ricerche sperimentali condotte un po' in tutti i paesi del mondo che:

> le capacità di codificazione autonoma secondo due o più codici linguistici diversi (e cioè l'acquisizione di competenze linguitiche assolutamente autonome) cominci a perdersi intorno ai sei anni e che sia pressochè scomparsa verso i dieci/undici anni (Cecioni, *Le lingue del mondo*, No. 3 1982, p. 151)

e che quindi occorre iniziare, contrariamente a ciò che si pensava qualche decennio fa, lo studio delle lingue preferibilmente prima dei sei anni di età.

Per lo più nel corso dello stesso ventennio e quindi simultaneamente alla 'scoperta' appena descritta, il popolo maltese ha ricominciato ad avere mediante i programmi televisivi italiani un contatto vivo con la lingua italiana a livello di ascolto e comprensione. Le giovanissime generazioni non sono escluse da questa situazione di assorbimento linguistico. Anzi, grazie al fascino che esercitano su di loro programmi come i cartoni animati e i telefilm i ragazzi si espongono alla lingua italiana volontieri e costantemente, per una media di due ore al giorno.

A questo punto quindi non resta altro che dire che probabilmente è arrivato il tempo di introdurre di nuovo l'insegnamento dell'italiano nelle scuole elementari a cominciare dal quarto anno, e cioè quando i discenti hanno otto anni, che è l'età adatta per impartire una lingua. Inoltre è significativo che i nostri alunni sono estremamente disposti ad apprender l'italiano.

Per alcuni questa proposta può sembrare molto teorica e difficile da attuare. Naturalmente è una cosa proporre e un'altra eseguire, comunque credo che ci siano le basi per un tale passo. Non intendo qui fornire un programma perché una cosa del genere richiederebbe lunghe ricerche e sperimentazione, perciò mi limiterò a spiegare le ragioni che favoriscono l'insegnamento dell'italiano nelle scuole elementari.

Inanzitutto credo che prima di pensare a un progetto nazionale, si debba come primo passo lavorare in un ambiente piccolo preferibilmente di non più di cinque scuole per un minimo di due or tre anni. Ciò aiuterebbe a minimizzare i problemi e ad essere in posizione migliore a sperimentare e a valutare i risultati.

Naturalmente se si parla dello studio dell'italiano si deve parlare di un certo numero di ore la settimana riservate appunta per questa attività. Francamente credo che una mezz'ora al giorno, vale a dire due o tre ore la settimana basteranno, specialmente quando si prende in considerazione che la stragrande maggioranza dei discenti guarda un programma televisivo italiano al giorno.

Indubbiamente il problema più grosso è quale forma dare a questa mezz'ora d'italiano. Si deve trattare non di una lezione formale bensì di un'attività che è quasi un gioco. Bisogna sfruttare il fascino che i programmi televisivi italiani esercitano sui ragazzi e adottarli come punto di partenza per le lezioni. Perciò a suola si potrebbe discutere sull'episodio di un cartone trasmesso il giorno prima, riproponendo gli stessi ingredienti del programma televisivo: immagini (e colori), emozioni, sorprese, divertimento, slogan, canzoni (le sigle) e così via. Le figurine e i rotocalchi che i nostri alunni hanno in mano, più il testo delle canzoni, i dialoghi e racconti registrati su nastro saranno i sussidi da portare in classe. A questo proposito si può per esempio dare vita a dei 'club' i cui membri naturalmente saranno gli alunni in questione. Ciò non soltanto garantirebbe una provvista di materiale visivo ma anche motiverebbe gli alunni a partecipare direttamente alla lezione-gioco.

Su questo argomento della partecipazione diretta devo aggiungere qualche altra riga. La partecipazione attiva dev'essere costante altrimenti si rischierebbe di soffocare il divertimento, ingrediente indispensabile per non sopprimere l'inclinazione 'naturale' degli alunni ad apprendere la 'lezione' come consolidamento guidato e strutturato dell'apprendimento libero del bambino, dunque per aiutarlo a comprendere meglio che è l'unica cosa che lo interessa a questo stadio. Va da sè quindi, che l'attività didattica dev'essere concentrata sopratutto sulle abilità orali in modo particolare il comprendere che del resto è il bisogno più immediato degli alunni. Ciò però senza escludere l'uso appropriato delle abilità grafiche (scrivere e leggere[1]) specialmente quando queste servono a fissare un concetto particolare.

Per lo più va aggiunto che bisogna variare le attività ed evitare ripetizioni inutili di un particolare contenuto. Quindi un'attività diversa per giorno — cantare la sigla di un programma favorito, raccontare e drammatizzare un episodio particolare da un cartone animato, scambiare materiale visivo, fare un quiz su un programma particolare, ecc — perché gli alunni non perdino la predisposizione ad apprendere la lingua della televisione, la lingua che offre varietà, spettacolo e divertimento.

Il primo problema è che l'insegnante si trova in svantaggio perché deve fare i conti con la televisione, e cioé con un mezzo didattico che indubbiamente possiede certe qualità che nessun insegnante possa mai possedere. Per conseguenza l'insegnante rischia di presentare la lingua italiana in un modo molto diverso da quello che usa la televisione, e quindi di soffocare la motivazione dei discenti ad apprenderla perché con essa associano il divertimento. Leonard Bloomfield scrive che

> Molte persone trovano difficoltà all'inizio dello studio della lingua non perchè non comprendano i metodi o i risultati (che sono abbastanza semiplici) ma perchè incapaci di liberarsi dai procedimenti che vengono esercitati su di loro dalla comune concezione scolastica. (Bloomfield, citato in De Martino 1983, p. 37)

Questo problema della mancanza di coerenza tra la lingua fuori e la lingua dentro l'aula scolastica,per quel che riguarda l'italiano qui a Malta si sente da parecchi anni in particolare modo nel campo della motivazione. Esiste un divario tra l'italiano della televisione e l'italiano dell'aula. Infatti i discenti entrati per la prima volta nell'aula d'italiano (accenno qui alla prima classe della scuola media) conoscono già molti elementi della lingua che d'ora in poi devono studiare come materia scolastica: quel qualcosa, minimo quanto sia, l'hanno imparato da soli, secondo quei procedimenti che gli sono propri e naturali. Dunque, quando nell'aula studiano un italiano scolastico, rigido, grammaticale e lontano dai loro interessi, cominciano a perdere ogni motivazione e anche a provare le prime antipatie verso la lingua.

Suggerire dei rimedi per risolvere questo problema (sia per l'insegnamento ai livelli della scuola elementare sia per quello ai livelli della scuola media specialmente nel primo anno) penso che sia un compito piuttosto difficile, ma non impossibile. Prima di tutto l'insegnante dev'essere conscio della presenza televisiva. Naturalmente non deve mancare quella risolutezza e convinzione che sia di vantaggio anzichè d'impedimento per l'insegnamento. Poi il didatta dev'essere dedicato al suo mestiere e pronto quindi a fare qualche sacrificio che del resto poi gli darà più soddisfazione, perchè come insegnante riuscirà meglio. Con sacrificio non voglio suggerire compiti ardui, ma fatti pratici e di ogni giorno. Potrebbe per esempio seguire un pò i programmi televisivi specialmente quelli preferiti dai suoi discenti;

tentare di analizzare il contenuto, il tipo di strutture linguistiche e il vocabolario di qualche programma per poi integrarlo nell'unità didattica; prendere spunti di cultura specialmente di tipo antropologico e così via. Tutto ciò significa portare, anche se con limitazioni, il prodotto televisivo nell'aula scolastica e farlo, insieme con il discente, centralità di tutta l'attività didattica.

Un secondo problema sarebbe che ai livelli di scuola elementare non tutti i maestri conoscono l'italiano bene. Per conseguenza non tutti sarebbero in grado di aiutare i loro discenti nello studio dell'italiano. Sorge quindi un problema di carattere amministrativo: si deve accertare che ogni insegnante abbia una conoscenza (almeno minima ma soddisfacente) dell'italiano. Francamente comunque credo che poi a questo problema ci sia una soluzione abbastanza facile e cioè avere in ogni scuola un insegnante che invece d'insegnare le materie che di solito s'insegnano nella scuola elementare, insegna la lingua italiana. Ciò succeded già per ciò che concerne l'insegnamento di materie come la musica, l'arte e l'educazione fisica. Per lo più vedo molti vantaggi in un sistema del genere (un insegnante d'italiano in ogni scuola elementare); un'aula riservata all'italiano e quindi appositamente apparecchiata con un televisore, un video, un registratore, dei rotocalchi televisivi, una carta geografica dell'Italia e così via; una concentrazione di risorse e di sussidi in un luogo (l'aula) accessibile a tutti; un'aula dove più o meno gli alunni si sentono partecipi di una simile atmosfera a quella nella quale s'immergono quando a casa guardano programmi televisivi italiani.

Per molti, in modo particolare per gli insegnanti, l'introduzione dell'italiano ai livelli elementari causerebbe un altro problema, questa volta di carattere accademico. Secondo molti insegnanti (ed io del resto sono perfettamente d'accordo con loro) i nostri alunni hanno già troppe materie ed esami e perciò lo studio dell'italiano aggraverebbe la situazione. Comunque ciò succederebbe soltanto se lo studio dell'italiano assuma un carattere troppo accademico con lezioni faticose, compiti, esami e così via. Ma come ho già accennato qui sopra lo studio dell'italiano ai livelli elementari non dev'essere di tipo formale. Al contrario esso deve assumere un carattere molto informale e cioè simile a quello che inconsapevolmente si verifica davanti al televisore nel soggiorno di casa propria. Quindi più che una materia scolastica, come la matematica, l'inglese, la scienza, la storia, ecc. la mezz'ora d'italiano dev'essere considerata come estensione del programma tv e dunque svago. L'aula d'italiano si potrebbe chiamare il 'club' dell'italiano e cioè sfogliare qualche rotocalco, guardare un cartone animato, seguire sul registratore con l'aiuto di materiale visivo un racconto, drammatizzare situazioni, imitare personaggi, ecc.) e non per assistere a lezioni faticose.

Analizzando i vantaggi di una didattica televisiva ho fatto cenno all'assistenza che l'alunno trova nell'apprendimento della pronuncia. Infatti, ed è qui dove sorge il problema, citando Titone ho ammesso che un primo piano televisivo serve ottimamente a dare la visione netta del movimento delle labbra. In ciò c'è molta verità ma soltanto se si tratta di corsi di lingue appositamente fatti per lo studio di una lingua. Nella nostra situazione i programmi sono programmi generalizzati e cioè sono intesi come svago e non come corsi di lingua. Per lo più in molti casi sono programmi doppiati da altre lingue e conseguentemente il movimento delle labbra non corrisponde con l'articolazione della parola. Quindi nel nostro caso gli alunni non soltanto non trovano asistenza nell'apprendimento della pronuncia (per ciò che riguarda il movimento delle labbra, poichè per altri aspetti della pronuncia come l'intonazione, chiarezza, ecc. l'assistenza è naturalmente ottima) ma trovano un ostacolo difficilmente superabile.

Nonostante questi problemi ed altri ancora, credo che la situazione maltese degli anni Ottanta goda di una possibilità o, meglio di una qualità da non ignorare. Grazie ai programmi televisivi i maltesi, in modo particolare le giovanissime generazioni, sono più motivati ad apprendere la lingua italiana. La televisione italiana nel corso dell'ultimo decennio ha alimentato nei ragazzi maltesi un atteggiamento positivo verso la lingua italiana. Questo atteggiamento conviene, anzi bisogna sfruttarlo e cioè renderlo utile nell'ambito dell'insegnamento e apprendimento della lingua.

Nel corso di questa esposizione ho tentato una visione orientativa della situazione relativa al fascino che esercitano i programmi televisivi italiani sugli allievi maltesi e concludo con l'asserire ancora una volta che siccome la motivazione dei nostri ragazzi è ottima, sarebbe utile di introdurre gradualmente lo studio dell'italiano nelle scuole elementari. Sarebbe anti-pedagogico a mio avviso, non farlo quando esiste un livello ottimale di circostanze che lo auspicano. Naturalmente, allo stato attuale e cioè la mancanza di esperienza e di ricerca conviene proseguire con cautela e prudenza.

È opportuno agire subito perché più presto si raggiunge un'adeguata comprensione dei cartoni animati più facile sarà il passaggio del ragazzo a programmi più impegnativi (teleserial, film). Così con un buon trampolino di lancio il cittadino maltese adoloscente e adulto non troverà difficoltà a seguire quei programmi culturali (sceneggiati

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Żbalji Ortografiċi Komuni fl-Eżami tal-Malti tal-Matrikola Ordinarja

Wilfred Cassar
Vincent Diacono

Introduzzjoni

Ir-riċerka li ppreżentajna fit-teżi *Analiżi ta' l-Iżbalji, l-Aktar Dawk Ortografiċi, fl-Eżami tal-Malti I Matrikola Ordinarja, Ġunju 1983,* flimkien ma' l-istatistika u l-analiżi dwar il-kitba bil-Malti fl-Eżami tal-Malti Matrikola Ordinarja (Mejju/Ġunju 1983), jagħtu ħjiel tal-livell u l-mentalità taż-żgħażagħ fil-lingwa materna tagħhom.

Wieħed jista' jara x'livell laħqu dawn il-kandidati li resqu għal dan l-eżami, kif ukoll wieħed jista' jara jekk il-lingwa Maltija hijiex timxi ma' l-iżvilupp tad-dinja u jekk hemmx bżonn li l-għalliema tal-Malti fl-iskejjel Primarji/Sekondarji jagħmlu iktar enfasi fuq il-lingwa Maltija kemm miktuba kif ukoll mitkellma. Il-kontenut tat-teżi jikkonsisti f'tiftix, studju u analiżi ta' l-iżbalji fil-komponiment u l-"Comprehension test" tal-kandidati. Uħud mill-iżbalji li ġew analizzati huma fl-idejat u sentenzi, fis-sintassi, żbalji ortografiċi u lessikali.

Għan u firxa tat-tiftix
L-għan ta' dan it-tiftix mhux qiegħed biss biex juri kemm l-edukazzjoni u l-mentalità elitista qed ittejjeb l-użu u l-kitba tal-lingwaġġ Malti, iżda wkoll biex fejn hemm bżonn, jinstabu mezzi u modi biex jgħinu lit-tfal, l-għalliema u 'l kull min hu kkonċernat fit-tagħlim u t-tixrid tal-Malti, biex żbalji bħal dawn jiġu evitati kemm jista' jkun.

F'dan l-artiklu, aħna ħadna biss siltiet mit-teżi msemmija. Ħassejna li tkun ħaġa tajba li nagħtu rendikont ta' l-iżbalji komuni l-aktar dawk ortografiċi li aħna ltqajna magħhom fit-tiftix tagħna.

Dan l-istudju huwa bbażat fuq "sample" li ttieħed min-numru ta' skripts tal-kandidati li kienu resqu għall-eżami tal-Malti, tal-Matrikola Ordinarja, Sessjoni Ġunju 1983, l-ewwel karta. Aħna ħdimna biss fuq il-komponiment u fuq is-silta ta' proża (Comprehension Test), li huwa t-tieni eżerċizzju fl-Ewwel Karta ta' l-eżami.

Dan is-"sample" ittieħed kif ġej:

Għal dan l-eżami, kienu resqu 2143 kandidat. Għas-"sample" ittieħed skript wieħed minn kull ħamsa tat-total kollu, li ammontaw għal 340 skript u li juru 15.9% ta' l-iskripts kollha. Fil-fehma tagħna, dan huwa "sample" kbir biżżejjed biex jagħti stampa ċara ta' l-iżbalji differenti magħmula mill-kandidati kollha.

Konklużjonijiet u suġġerimenti dwar xi wħud mill-iżbalji.

Tabella 1

Item	Kandidati 'Comp. Test'	Komp.	Medja
Konsonanti li jixxiebhu	104	145	36.6%
L-użu ta' l-'h' u l-'ħ'	167	165	48.8%
L-użu tal-konsonanti 'z' u 'ż'	237	104	50.4%
L-użu tal-konsonanti 'g' u 'ġ'	156	61	31.9%
L-użu tal-konsonanti 'ċ'	142	77	32.2%
Is-sing ta' l-artiklu	188	153	50.1%
L-użu tal-vokali tal-leħen fl-artiklu	157	122	40.4%
Il-konsonanti doppji fil-kliem	214	250	68.2%
L-użu tan-negattiv	106	68	25.6%
L-użu tal-partiċelli	216	239	66.8%
L-użu tal-maskil u l-femminil	36	10	6.77%
Użu ta' kliem barrani fil-Malti	156	67	32.8%
L-użu tal-verb	166	200	53.8%
L-użu tal-qwiel u idjomi	88	62	22%

Konsonanti li jixxiebhu
In-numru ta' kandidati li ħadu żball fil-konsonanti li jixxiebhu fil-ħoss, fil-komponiment jammonta għal 145 waqt li fil-"Comprehension Test" jammonta għal 104; il-fatt li l-medja hija ta' 36.6% jurina li l-problema tal-konsonanti li jixxiebhu fil-ħoss verament teżisti. Infatti kemm fil-komponiment kif ukoll fil-"Comprehension Test", l-iktar tip ta' żbalji komuni jikkonċerna l-kitba ta' konsonanti flok oħra

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tratti da opere letterarie e documentari storici, scientifici, ecc.) che allargano gli orizzonti e approfondiscono gli interessi specifici. Se saranno sempre più numerosi i cittadini maltesi che si approfitteranno dell'ottimo materiale culturale disponibile a un semplice tocco di telecomando, le consequenze non possono non essere benefiche allo sviluppo sociale e intelletuale della nostra comunità.

1. Qui va ricordato che all'età di otto anni gli alunni già sanno scrivere e leggere. Dunque per loro non è una fatica leggere e copiare qualche vocabolo o struttura — frase in contesto, senza metalinguaggio — dalla lavagna o da materiale stampato.

li tinstema' bħala. Eżempju: "tħul" flok "dħul", "sfin" flok "żfin".

Biex l-istudenti jkunu jistgħu jagħrfu liema konsonanti li tixxiebah għandha tinkiteb, l-għalliema jistgħu jgħaddulhom suġġerimenti partikolari jiġifieri li jżidu vokali jew sillaba wara l-konsonanti kkonċernata.

Eż: "qalb" tinstama' "qalp" iżda bil-vokali "i" fit-tarf, tinstama' "qalbi".

Suġġeriment importanti ieħor jista' jkun li nbiddlu s-sura ta' l-istess kelma u ndeffsu vokali wara.

Eż: "żfin" tinħass "sfin" iżda mbagħad nsemmu "żifna".

L-użu ta' l-'ħ' u tal-'ħ'

Mit-*Tabella 1* naraw li fil-komponiment 165 kandidat ħadu żball, waqt li fil-"Comprehension Test" kien hemm 167 kandidat; ċioè medja ta' madwar 48.8%. Dan ifisser li nofs il-kandidati ma kellhomx il-ħila jiddistingwu bejn il-konsonanti 'ħ' u l-'h' fil-kitba. Ta' min jinnota li ħafna mill-kliem żbaljat għandu ħoss ċar ta' 'ħ' jew 'h' bħal dawn iż-żewġ żbalji, li huma: *haddiema, b'ħekk*. F'dawn iż-żewġ mudelli nsibu jew li l-kandidati ma tawx kas għal mod kif għandhom jinkitbu dawn il-konsonanti jew verament ma kinux jafu d-differenza. Dan juri li l-għalliema jridu jenfasizzaw iżjed il-qbil bejn il-ħoss tal-'ħ' u l-'h', u l-mod kif jinkitbu. Fi kliem fejn l-'h' tieħu l-ħoss ta' 'ħ', l-għalliema jistgħu jgħaddu suġġeriment lit-tfal biex dawn ipoġġu vokali wara l-konsonanti li għandha l-ħoss ta' 'ħ' biex jekk il-konsonanti tibqa' bil-ħoss ta' 'ħ' din għandha tinkiteb bħala 'ħ', mentri jekk il-ħoss ta' 'ħ' jintilef meta jkun quddiem vokali, din il-konsonati għandha tinkiteb bħala 'h'.

Eż: "agħtih" tinkiteb bl-'h' għax ngħidu "agħtiha"

"hieni" tinkiteb bl-'h' għax ngħidu "hena".

Żball ieħor huwa n-nuqqas tal-qtugħ ta' ras l-'ħ' fl-'għ'. Insibu eżempji bħal:

"għalhekk" u mhux "ghalhekk"
"tilgħab" u mhux "tilghab"

L-użu tal-konsonanti z/ż, g/ġ u ċ

Għalkemm ir-riżultati ta' dan it-tip ta' żball huma differenti kemm fil-komponiment (104 kandidati) kif ukoll fil-"Comprehension Test" (237 kandidati) minħabba li fil-"Comprehension Test" kien hemm numru konsiderevoli aktar ta' żbalji mill-komponiment, xorta jibqa' l-fatt li l-medja ta' kandidati li żbaljaw hija ta' 50.4%. Dan ifisser li ħafna kandidati ma jagħtux kas tal-mod kif tinkiteb il-konsonanti 'z' jew 'ż', għalkemm hemm xi kliem li jistgħu jkollhom il-ħoss ta' "z" ambigwa bħal, per eżempju: "mezzi", "stanza", "gazzetta". Iżda jibqa' l-fatt li ħafna mill-kandidati għamlu żbalji fi kliem sempliċi bħalma huma "rikreażżjoni" flok "rikreazzjoni", "kazini" flok "każini" u "zmien" flok "żmien".

Ir-raġuni aktarx tinstab fil-mod kif qed jiġu mgħallma dawn iż-żewġ konsonanti. Hemm bżonn li minn kmieni l-għalliem joħloq tip ta' logħob edukattiv biex it-tfal jiddistingwu d-differenza fil-ħoss ta' 'z' u 'ż', kif ukoll fil-kitba. Kull meta l-għalliema jaraw l-istudenti jiżbaljaw fihom, jenfasizzawlhom il-ħoss u l-kitba ta' dik il-konsonanti partikolari.

Il-medja ta' kandidati li żbaljaw fil-kitba tal- 'g' u tal-'ġ' hija ta' 31.9% Fil-komponiment kien hemm 61 kandidat li żbaljaw, waqt li fil-"Comprehension Test" kien hemm 156 kandidati li ħadu żball fil-kitba tal-'ġ' u 'g'. Ħafna kandidati żbaljaw fi kliem sempliċi fejn mhux suppost li kien hemm ambigwità fil-kitba tal-konsonanti 'ġ' u 'g'.

Eż: "progetti" flok "proġetti"
"ġwaj" flok "gwaj"

L-istess suġġeriment għall-kitba taż-'ż' u z-'z' jista' jerġa' jiġi msemmi, jiġifieri, jekk irridu li jkun hemm iżjed attenzjoni fil-kitba ta' dawn il-konsonanti, hemm bżonn li dawn jiġu mgħallma b'mod effettiv biex b'hekk it-tfal jaslu biex jaraw id-differenza li teżisti fil-ħoss bejn il-konsonati 'ġ' u 'g', u l-kitba differenti tagħhom li hija marbuta ma' l-istess ħoss.

Minn din il-kategorija ta' żbalji, l-inqas medja (32.3%) instabet fil-kitba ħażina taċ-'ċ' (ara Tabella 1). Hawnhekk tajjeb li wieħed josserva li ħafna kandidati jew ma kinux jafu jew insew li fil-Malti l-konsonanti 'c' mingħajr tikka ma teżistix ħlief f'xi kunjomijiet bħal: Cassar, Camilleri, u oħrajn. Bla dubju, trid tiġi mogħtija iktar attenzjoni għal mod kif l-għalliema jgħallmu u jikkoreġu din il-konsonanti partikolari, u kemm jista' jkun ma jħallux il-kitba tat-Taljan u ta' l-Ingliż tinfluenza l-ortografija Maltija.

L-użu ta' l-artiklu

In-numru ta' kandidati li żbaljaw kemm fil-komponiment (153) kif ukoll fil-"Comprehension Test" (188) huwa wieħed kważi korrelatat: il-medja tal-kandidati li żbaljaw fl-użu ta' l-artiklu u s-sing hija ta' 50.1% Waħda mid-diffikultajiet li ltaqgħu magħhom il-kandidati hija l-kitba tas-sing wara l-artiklu. Minn dan jirriżulta li ħafna mill-kandidati jew insew jew ma jafux ir-regola bażika li fil-Malti, l-artiklu bil-fors irid jieħu s-sing. Ħafna mill-kandidati qed jiġu mfixkla mill-kitba ta' l-artiklu fil-lingwa Taljana, eżempju:

"l'uniku" flok "l-uniku" għax fit-Taljan jinkiteb "l'unico",
"il multa" flok "il-multa" għax fit-Taljan tinkiteb "la multa".

L-għalliema jridu jenfasizzaw iżjed il-kitba tajba ta' l-artiklu u s-sing quddiem nom jew aġġettiv, biex l-istudenti ma jħalltux l-artiklu ma' '-il' ta' kelmiet il-għadd, *eż: ħdax-il; kemm-il darba*, fejn is-sing jiġi qabel 'il' u mhux wara.

Ta' min jinnota wkoll li l-medja tal-kandidati li żbaljaw fil-kitba tal-vokali tal-leħen ta' l-artiklu hija ta' 40.4% (ara Tabella 1). Dan il-persentaġġ iwassalna għall-konklużjoni li ħafna kandidati ma jafux li l-vokali tal-leħen ta' l-artiklu taqa' meta tiġi wara kelma li tispiċċa b'vokali. Ħafna mill-iżbalji meħuda jixbhu dawn iż-żewġ mudelli:

"Il-problemi *u it*-tbatijiet" . . . . flok
"Il-problemi u t-tbatijiet . . . "
"Billi tobd*i il*-liġijiet" . . . . . flok
"Billi tobdi l-liġijiet . . . ."

Bħalma għadna kif semmejna ftit qabel, hawn ukoll hemm bżonn ta' iżjed taħriġ serju min-naħa tal-kandidati u korrezzjoni kontinwa min-naħa ta' l-għalliem. M'għandux ikun hemm diffikulta' biex tiġi mgħallma aħjar ir-regola dwar l-użu tal-vokali tal-leħen ma' l-artiklu f'sitwazzjonijiet differenti, minħabba li ħafna drabi ma jkunx hemm ambigwita' fit-tħaddim ta' din ir-regola.

Il-konsonanti doppji fil-kliem
Mill-analiżi li saret instab li kemm fil-komponiment (250 kandidati) kif ukoll fil-"Comprehension Test' (214 kandidati) kien hemm numru konsiderevoli ta' kandidati li żbaljaw fil-kitba tal-konsonanti doppji. Infatti, fiż-żewġ tipi ta' analiżi, iktar min-nofs il-kandidati tħawdu tant li l-medja ta' kandidati li żbaljaw toqrob lejn 68.2%. Mill-istudju li sar, instab li l-kandidati żbaljaw kemm fin-nuqqas ta' konsonanti doppji fin-nomi u verbi, eżempju: *hadieħor, jitwaqfu*, kif ukoll fl-użu ħażin tal-konsonanti doppji f'nomi u verbi, eżempju: *xitta, iħħossu*.

Dan kollu jwassalna għall-konklużjoni li l-istudenti mhux qed jiġu mgħallma b'mod effettiv fir-regoli fonetiċi ta' ħafna mill-kliem Malti.

L-użu tan-negattiv
Il-medja ta' kandidati li kitbu n-negattiv ħażin hija ta' 25.6%; b'hekk jirriżulta li fil-komponiment 68 kandidat ħadu żball, waqt li fil-"Comprehension Test" in-numru tela' għal 106 kandidati jiġifieri, il-kandidati li żbaljaw kienu jammontaw qrib kwart ta' dawk il-kandidati "sampled". Il-fatt li n-numru ta' kandidati huwa relattivament baxx, jagħtina x'nifhmu li b'iktar attenzjoni min-naħa ta' dawk li żbaljaw, żgur li dan l-iżball jonqos. Hemm bżonn li l-istudenti jitgħallmu b'mod prattiku wħud mir-regoli l-iżjed bażiċi tan-negattiv — Eż: fin-negattiv, il-partiċella *ma* m'għandhiex apostrofu, verb li jispiċċa b'apostrofu taqagħlu l-*għ* bħal 'ma baqax', waqt li ċertu kliem ieħor fin-negattiv għandu jiġi mogħti iktar importanza minħabba t-tlissin u l-kitba tiegħu bħal *mandhomx* flok "m'għandhomx", *maj kunx* flok "ma jkunx".

Kemm bil-metodu tradizzjonali kif ukoll bil-metodu modern, m'għandux ikun hemm diffikulta' biex jiġi mgħallem aħjar l-użu tan-negattiv.

L-użu tal-partiċelli
Il-medja tal-kandidati li żbaljaw, kemm fil-komponiment kif ukoll fil-"Comprehension Test", hija ta' 66.8% (ara *Tabella 1*). Dan ifisser li l-maġġoranza tal-kandidati ma kinux ċerti mill-użu tal-partiċelli. L-iżbalji tal-kandidati jistgħu jiġu kklassifikati f'żewġ kategoriji:

(i) l-użu ħażin tal-partiċelli ma' l-artiklu ta' xi nom partikulari, eżempju:
*". . . . jiġbed lil*l *nies il-barra . . . ." flok*
". . . . jiġbed lin-nies 'il barra . . . ."
(ii) l-użu ħażin tal-partiċelli quddiem nom mingħajr l-artiklu, eżempju:
". . . . irid ifendi għall rasu . . . . ." flok
". . . . irid ifendi għal rasu . . . . ."

Dan ma jfissirx li m'hemmx kategoriji oħra ta' żbalji, iżda jibqa' l-fatt li l-kandidati tħawdu l-iżjed f'dawn iż-żewġ kategoriji Aktarx li l-iktar suġġeriment adegwat huwa li jkun hemm taħrig kontinwu u ggradat minħabba partiċelli differenti u sitwazzjonijiet differenti li nkitbu fihom. B'dawn l-eżerċizzji kontinwi u ggradati minn sempliċi għal aktar kumplessi, il-kandidati jaslu biex jifhmu kif għandhom jitħaddmu dawn l-elementi lingwistiċi partikulari. Jinkitbu l-partiċelli "bħal", "lil", "għal" u "minn' meta ngħidu *ta'* qabel nom jew isem propju, (dan jiġri meta l-kelma ta' wara l-partiċella ma tkunx tieħu l-artiklu definit), waqt li niktbu "bħal-", "għall-", "lill-", "mill-" meta ngħidu *tal-* jew *ta' l-*, (jekk il-kelma ta' wara l-partiċella tieħu l-artiklu definit),
eżempju:

Agħti dan *lil* Ġanni għax ngħidu "ta' Ġanni"
Agħti dawn il-kotba *lill-*ħbieb tagħna għax ngħidu "tal-ħbieb tagħna".

Meta "lill-", "għall-", "bħall-", "mill-" u "minn" ikunu quddiem kelma li tibda bl-istess konsonanti li tispiċċa biha dik il-partiċella, din

l-istess partiċella twaqqa' waħda mill-konsonanti tat-tarf, eżempju:

"Dan meħud *mil-liġi* ta' Malta."

Il-maskil u l-femminil fis-sentenzi
Waqt li l-kandidati li żbaljaw il-ġens fil-komponiment kien ta' 2.94% ta' dawk "sampled", fil-"Comprehension Test" kien hemm 10.6% minn dawk "sampled". Jekk wieħed igħodd dawn ir-riżultati flimkien isib medja ta' 6.77%, jiġifieri persentaġġ verament baxx. Il-maġġoranza tal-kandidati aktar ħawdu l-ġens fi frażi partikulari milli f'kelma partikulari:

Eż: "Jekk *id-domanda* tkun *kbir* . . . ." flok
"Jekk id-domanda tkun kbira . . . ."

Minn dan l-istudju naslu għall-konklużjoni li dawn il-ftit kandidati, għalkemm jistgħu jkunu jafu l-maskil jew femminil ta' kelma partikulari, xorta m'humiex kapaċi jqabblu l-ġens fi frażijiet jew kliem differenti ta' l-istess sentenza; dan jista' jkun kaġun ta' nuqqas ta' tħaddim morfoloġiku tal-lingwa għax kieku, ma kinux jagħmlu ħafna minn dawn l-iżbalji. Eżempju ieħor ta' dan in-nuqqas huwa:

". . . . *id-differenza* li hemm *hu* li dawn . . . ."
flok
". . . . id-differenza li hemm hi li dawn . . . ."

Minħabba nuqqas ta' spazju, żbalji komuni oħra ta' l-għ fil-verbi, l-użu ta' kliem barrani fil-Malti, żbalji sintattiċi u oħrajn ser jitħallew barra.

Waħda mill-problemi li dejjem iffaċċja l-Malti kienet dik ta' l-ortografija. Żgur li dan l-istudju jservi ta' fejda kemm għall-għalliema kif ukoll għal dawk l-istudenti li bi ħsiebhom jersqu għal dan l-eżami. Bi ftit ħsieb u prattika, wieħed jista' jevita ħafna żbalji speċjalment dawk ikkaġunati mit-traskuraġni.

Students' Dissertations

The following are the Dissertations written by students in the Year Group 1976-81 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Agius Carmen	*Play: An Educational Process - With special reference to the provision of educational toys*	*L. Rizzo*
Agius Mary Rose Attard Jane	*An Analysis of a Mathematics Paper.*	*J.M. Falzon*
Attard Carmel Darmanin Mario	*Postijiet u Nħawi Storiċi f'Haż-Żabbar.*	*M. Sant*
Attard Cassar Em. Sciortino Joseph	*Mathematical Games*	*C. Gauci*
Azzopardi Liliana Cini M'Carmen Galea Rosette	*Conservatism among Maltese Children.*	*J.M. Falzon*
Azzopardi Maria J.	*A Survey Related to the Amount of Exposure to Spoken English during English lessons ina sample of Government Girls' Secondary Schools (Forms I and II).*	*C. Calleja*

The following are the Dissertations written by students in the Year Group 1976-81 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Azzopardi Mario A.	*Teaching the Appreciation of the art of the film.*	*M. Sant*
Balzan Joseph	*Educational Broadcasting in Malta.*	*G. Bonnici*
Bonaci Marianne German Pauline	*The Influence of Family size, age and the father's occupation on pupil's attainment.*	*J.M. Falzon*
Bonavia Marianne Sciberras Helen	*Performance of Young Maltese children in Three non-verbal tests.*	*J.M. Falzon*
Bonavia Speranza	*Teaching Home Economics to low attainment students in the upper forms of the secondary school.*	*J. Pullicino*
Bonnici Raymond	*A Study of the Use of two*	
Grech John Spiteri Saviour	*Intelligence tests with Maltese children in Year 5.*	*J.M. Falzon*
Borg Rosanne	*Correlation Between the Religion, Maltese and Social Studies 1978 Secondary School Annual Exam. Papers.*	*J.M. Falzon*
Borg Rosette Camilleri Irene Formosa Michelle	*The Effectiveness of Teacher Training Amongst Maltese Teachers (A Survey).*	*C.J. Farrugia*
Calleja Emanuel Gerardi Joseph	*Analysis of an English Examination Paper.*	*D. Cuschieri*
Calleja Josephine	*A Child's Social and Educative Development: A Study on a Sample of Children and their Environment.*	*L. Rizzo*
Camilleri Joseph	*Sex Education and Maltese School Boys.*	*L. Rizzo*
Camilleri Mario	*A Study of Two Word-Recognition Tests (English and Maltese)*	*J.M. Falzon*
Cardona Anthony	*Parent-Child Relationships in Relation to Attainment.*	*L. Rizzo*
Cassar Joseph	*The Educational Value of Art*	*J. Eynaud*
Dalli M'Carmela	*English Picture Composition: A Survey and Assessment.*	*H. Schembri*
Debono Vincent Schembri Emanuel	*The Relationship between Attainment and Family Size and Socio-Economic Status (at Form III Level).*	*J.M. Falzon*
Farrugia Marika	*Concept formation in Children.*	*J.M. Falzon*
Fenech Joseph	*Il-Mistier fil-Barriera.*	*M.R. Gatt*
Fenech Michael	*Drama in Education*	*J. Eynaud*
Gauci Joseph	*The Medium of TV as it Influences the Socialization of Pre-School Children.*	*L. Rizzo*
Grech Raymond	*The Influence of the film on Education.*	*L. Rizzo*
Grima Joseph	*Industry, Industrialization and Education: A Case Study on Gozo.*	*K. Wain*
Mangion Bernardine	*Housing in Malta - A Study for the Home Economics Teacher.*	*C.J. Farrugia*
Mayo Peter	*The National Museum of Fine Arts: A Handbook for Teachers (Text and Notes).*	*C. Calleja*
Pace Oliver	*English Spelling: A Source of Difficulty for the Maltese Learner in the lower forms of the Secondary Schools.*	*D. Cuschieri*
Privitera Austin Xerri Anthony	*Coming Into Poetry.*	*C. Calleja*
Pullicino Lydia	*Our Senior Citizens.*	*L. Rizzo*
Schembri Maria	*The Attainment of Boys and Girls in Relation to Teachers' Sex.*	*J.M. Falzon*
Spiteri Cini Anthony	*Il-Poeżija fl-Antoloġiji ta' Poeżiji għall-Iskola Primarja u għall-ewwel klassijiet fis-sekondarja.*	*M.R. Gatt*
Spiteri M'Anne	*The Influence of the Socio-Economic Environment on School Entry.*	*L. Rizzo*
Spiteri M'Doris Vella Therese	*The Moral Judgement of the Child.*	*J.M. Falzon*
Spiteri Cachia Ant.	*Letteratura Maltija għat-tfal. Vol. I.*	*M.R. Gatt*
Tomasuolo Marco	*The Family as a Social Agent.*	*L. Rizzo*
Tonna M'Louise	*Pupil' Response to Guidance and Counselling in Malta.*	*L. Rizzo*
Zammit Emanuel	*The Making of a Religion Text Book for Infants Year I.*	*J. Pace*

The following are the Dissertations written by students in the Year Group 1977-81 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Abela Rita	*The Concept of Weight, Area and violence in the Primary School.*	*C. Gauci*
Agius Marina	*A Three Year Mathematical analysis.*	*A Sammut*
Agius Raymond	*Education and Satisfaction.*	*L. Rizzo*
Aquilina Agnes Belcher Cousin Y.	*The 'Copying' Sub-Test from the British Intelligence Test.*	*J.M. Falzon*
Attard Charles	*The Image of the Teacher in a Selection of Victorian Novels.*	*J. Bujega*
Bonello Charles Falzon Martin	*Community Resources for Science Teaching.*	*F. Ventura*
Borg Lorraine	*The use of Bendes-Gestalt Test for Maltese Children.*	*J.M. Falzon*
Calleja James Camenzuli Anna	*Problemi di apprendimento dei discenti maltesi.*	*J. Eynaud*
Cassar George Cassar Pauline	*The Teaching of History in Maltese Schools.*	*M. Sant*
Cassar Joseph	*Social Services and Policies from the 1920's up to the present day.*	*M. Sant*
Cassar Laurence Grech Norman	*History as an Adult Study: An Investigation.*	*M. Sant*
Curmi J. (Bro.)	*Recall and Recognition in 11-13 year old Maltese boys.*	
Deguara Joseph Testa Mario	*Poetry for the Primary.*	*C. Calleja*
Falzon Martin	*Community Resources for Science Teaching.*	*F. Ventura*
Galea Joseph	*The Interrelationship between Mathematics and Science Curricula for Secondary Schools.*	*G. Gauci*
Gauci Maria Pia	*Teaching - The Short Story - By themes.*	*C. Calleja*
Micallef Carmel S.	*Parental Influence on the Reading Ability of Children 7-11.*	*L. Rizzo*
Musemeci Martin	*The Special Science Exam (1977-78): A Study.*	*F. Ventura*
Pace Anthony	*Recreating the Past.*	*M. Sant*
Pace Paul	*The Effect of Parental Occupation and Occupational Mobility on the Educational Attainment and Future Ocupation of the Male Child.*	*L. Rizzo*
Zammit Satariano R.	*Parental Attitude towards Discipline and the Attainment of the Child.*	*L. Rizzo*

The following are the Dissertations written by students in the Year Group 1978-82 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Abdilla John Buhagiar Joseph	*Field-Study Scheme at Villa Psaigon.*	*F. Ventura*
Agius Carmel V.	*Deborah - The First 1000 Days.*	*J.M. Falzon*
Aquilina Paul	*Il-Letteratura u kitba oħra bil-Malti għat-tfal fil-Ġurnali Maltin sas-sena 1946.*	*M.R. Gatt*
Attard Josette	*Supplementary Reading: A Survey*	*C. Calleja*
Attard Ruth Bugeja Bridget	*A Study of Maltese Children aged 4 and 5.*	*L. Azzopardi*
Berry Paul Camilleri Liberato	*Influence on Mathematical Attainment.*	*C. Gauci*
Bezzina Christopher	*Teaching of Poetry in Forms 1 & 2 (Boys): Methods and Approaches.*	*C. Calleja*
Bonanno Philip Cini France	*Production & Evaluation of Teaching Kit in Biology.*	*F. Ventura*
Borg Norman Pace C.	*A study of the leisure time of a sample of Maltese Secondary School pupils.*	*J. Eynaud*
Brincat Marisa	*Teaching Aspects from the Mediterranean in Form II A Thematic Approach.*	*J. Agius*
Buttigieg Mary Anne	*Guiseppe Valla (1827-1912) His life and musical works with special reference to Messa de Requeim.*	*J. Vella*

The following are the Dissertations written by students in the Year Group 1978-82 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Cachia Patricia	*Aspects of the language of Maltese 5 year olds.*	*M.R. Gatt*
Camilleri John	*Conservation of numbers among Maltese Children.*	*C. Gauci J.M. Falzon*
Camilleri Mario	*Children's Humour - A Study of Maltese Children.*	*J.M. Falzon*
Camilleri Marisa	*A Study of the Development of the School Library in Government Schools in Malta.*	*J. Boffa*
Camenzuli Marthese	*The Education of the person in the secondary school curriculum.*	*L. Rizzo*
Camilleri Victor	*'Surveys' u Intervisti dwar il-Letteratura Maltija għat-tfal.*	*M.R. Gatt*
Camilleri Galea M.C.	*Primary School Geography in Nineteenth Century Malta.*	*J. Agius*
Cefai Carmel	*Aspects of the Social Life and Education in Żebbuġ, Gozo, during the last 50 years.*	*L. Rizzo*
Cutajar Eugenio	*Letteratura Maltija għat-tfal fir-Rivisti Maltin.*	*M.R. Gatt*
D'Amato Antoinette (Sr.)	*I libri di testo d'Italiano nelle scuole medie maltesi.*	*J. Eynaud*
Debono Vincent	*'Surveys' u Intervisti dwar il-Letteratura Maltija għat-tfal fl-Iskejjel Sekondarja tal-Gvern.*	*M.R. Gatt*
Farrugia Anna Maria	*A Normative Study of six and seven year old maltese children.*	*L. Rizzo*
Farrugia P. Nella	*Uno studio scientifico sulle devianze ortografiche in un dettato d'italiano.*	*J. Eynaud*
Galea Frankie	*A study of the Distribution of Piagetian Developmental Stages in Maltese female pupils (in the 12-16 age-range).*	*F. Ventura*
Gambin Edgar	*Il-Futbol f'Malta.*	*L. Borg*
Gerardi Feliz	*Guidelines in P.E. for Maltese Teachers.*	*L. Azzopardi*
Gilson Edward	*The Form I Geography Curriculum.*	*J. Agius*
Grima Lydia	*Une etude de la Chanson Francais et tant que Moyan Pedagogique pour l'ensignement de la langue et de la civilisation.*	*P. Gharmette*
Lapira Robert	*A Critique of Children's Literature.*	*C. Calleja*
Livori Victor	*Religion and its Place in Education with particular reference to Malta.*	*K. Wain*
Mangion David	*L'Apprentisage de la langue francais a travers la culture maltaise.*	*L. Seychell*
Martinelli Victor	*Problems encountered by the Maltese Learner of English in operating the English prepositional system.*	*D. Cuschieri*
Mifsud Joseph	*Teaching English to slow learners in Year Four.*	*G.A. Bonnici*
Mifsud Josephine	*It-Tagħlim fil-Klassijiet tat-Tfal Batuti fl-Iskejjel Primarji.*	*M.R. Gatt*
Mifsud Ronald	*Un'analisi degli errori morfologici commessi in italiano da 250 discenti maltesi.*	*J. Eynaud*
Pace Michael	*Cultura italiana a Malta tramite i giornali maltesi di lingua italiana.*	*J. Eynaud*
Schembri Carmel	*The Development of the Worker-Student Scheme in Malta.*	*L. Rizzo*
Schembri Dorothy	*Influenze reciproche fra letteratura e opera lirica nel Romanticismo.*	*J. Eynaud*
Scicluna-Calleja Alexandra	*Coping with change: A challenge to the Maltese Educational system.*	*G. Wettinger*
Scicluna Valerie	*Lifelong Education: Some Possibilities.*	*K. Wain*
Seychell Catherine (Sr.)	*Adolescent sensitivity towards moral values.*	*K. Wain*
Spiteri Guilio	*Il-Letteratura Maltija għat-tfal fix-Xandir.*	*M.R. Gatt*
Vella Andrea	*La canzone italiana del dopoguerra (con particolare riferimento agli anni 1960-1970).*	*J. Eynaud*
Vella Mark	*Error Analysis.*	*D. Cuschieri*
Zammit Giovanna Zammit Lupa Ber.	*Education as a process of liberation.*	*K. Wain*
Zammit Satariano Marlene	*A Study of a Home Economics Test.*	*A. Sammut*

The following are the Dissertations written by students in the Year Group 1980-85 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Attard Mary	*Aspetti Storiċi u Folkloristiċi tal-Festa ta' San Filep f'Ħaz-Zebbug.*	*M. Sant*
Azzopardi Alexandra	*The performance of Four-Year old Maltese children on three Ability tests.*	*J.M. Falzon*
Bezzina Leonard	*An Introduction to Mathematical Logic.*	*L. Sant*
Buhagiar Michael	*The B.A.S. 'Copying' Sub-Test and the Draw-A-Man Test: A Study.*	*J.M. Falzon*
Camilleri Margaret	*Kindergarten children's performance on the Form-board, draw-a-man and naming vocabulary tests.*	
Bonnici Pierre	*Vocational choice among Form I and Form II students.*	*J.M. Falzon*
Caruana Paul	*Sport in Maltese Society.*	*L. Borg*
Caruana Philip	*The Role of the Family in Vocational Development according to Social Class Difference.*	*L. Rizzo*
Dalmas Maria Stella	*German in Maltese Education: A survey of development and current tenders.*	*M.A. Azzopardi*
Debattista Carmen Mifsud M'Lucienne	*Teachers' Perception of Behaviour Problems.*	*J.M. Falzon*
Falzon Victor	*Man and Environment: Environmental Attitude in Local Society and Prospects for an Environmental Awareness through Education.*	*F. Ventura*
Galea Elizabeth	*Letteratura Maltija għat-tfal: (Vol. XI) Letteratura u Kitba oħra bil-Malti għat-Tfal f'xi Ġurnali Maltin mis-sena 1946 sal-bidu tas-snin tmenin.*	*M.R. Gatt*
Grech Josephine Anne	*Letteratura u Kitba oħra bil-Malti għat-Tfal f'xi rivisti maltin sas-sena 1960.*	*M.R. Gatt*
Grima Charles	*Letteratura Maltija għat-tfal vol. XIII studju kritiku, analitiku, tar-rivista Sagħtar.*	*M.R. Gatt*
Mamo Raymond	*Attitudes towards Physical Education and Sport.*	*L. Azzopardi*
Muscat Miriam	*An Analysis of Arithmetic Difficulties.*	*C. Axiaq*
Sammut Cynthia	*Sexism in Education: The Influence of the School on the Occupational Aspirations of the Maltese Girls.*	*J. Fenech*
Scicluna Maria A.	*From primary to secondary school mathematics.*	*C. Axiaq*
Spiteri Alfred	*St Paul's Missionary College: A study of a Catholic school in Malta.*	*J. Fenech*

The following are the Dissertations written by students in the Year Group 1981-86 and the names of the supervisors responsible for them according to the records of the Faculty of Education.

Name of Student	Title of Dissertation	Name of Supervisor
Agius Delicata E	*The Primary School and Lifelong Education.*	*Dr. K. Wain*
Agius Delicata M.	*An Item and Error Analysis of the Examination Paper of Form I, 1983 and Form II, 1984.*	*Mr. F. Ventura*
Attard Carmen	*Five Generations of Nani Musicianship.*	*Mro. J. Vella*
Buhagiar Tessie	*Mathematics in the University of Malta up to 1900.*	*Dr. S. Fiorini*
Busuttil Catherine	*Storja tal-Letteratura Maltija għall-iskejjel Sekondarji.*	*Dr. O. Friggieri*
Busuttil Emanuel	*The South Coastal Defences of Malta built during the Order of St. John (1530-1798).*	*Dr. G. Wettinger*
Camilleri Nathalino	*Item Analysis of a Physics Test: Two Approaches.*	*Mr. F. Ventura*
Caruana Dingli Noel	*L'apprentissage de la rancais a travers des activites ludiques.*	*Dr. L. Seychell*
Coleiro Josianne Paris Noel	*Misconception in Algebra at Secondary School Level.*	*Mrs. C. Axiaq*
De Gabriele Marcel	*Music: A guided approach for Secondary School teachers/An Introduction*	

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	to music in class for early secondary.	*Mro. J. Vella*
Cassar Mario	*Ir-rumanz Malti bejn 1930-1940.*	*Dr. O. Friggieri*
Grech Jesmond	*Towards an educational Museum of Archaeology.*	*Dr. A. Bonanno*
Mallia Magdalen	*It-Tagħlim tal-Malti permezz ta' topics għal Form II.*	*Ms. M.R. Gatt*
Mangion Joseph	*Counselling of students with problems of vocational choice.*	*Mr. M. Vella Haber*
Micallef Mario	*The University of Malta and the Promotion of Life-Long Education for the Community.*	*Dr. K. Wain*
Mizzi Doreen	*The Influence of Age, Sex, Family Size, Birth order and educational attainment*	*Prof. J.M. Falzon*
Salafia Sandra	*Self Images of Teachers in Malta.*	*Prof. C.J. Farrugia*
Sant Carmen	*Teaching music in the infant and primary levels of education.*	*Mrs. M. Azzopardi Barbieri*
Schembri Michael	*Educational Policy in Malta: A Marxist-Leninist Critique.*	*Dr. K. Wain*
Vella Josianne	*The Effects of Family Size, Father's Occupation, Age and Gender on Attainment.*	*Prof. J.M. Falzon*
Zahra Paul	*Work Phase 1982-83.*	*Mr. D. Cuschieri*
Zammit Joseph	*The Chemistry Form III Junior Lyceum annual examination paper - July 1983: A Study.*	*Mr. F. Ventura*
Bezzina Nicholas	*La società maltese odierna e la cultura italiana.*	*Dr. J. Eynaud*
Busuttil Stephen	*'Lolita': A critical review.*	*Dr. P. Vassallo*
Cacciatolo Helen	*Reading Failure.*	*Mr. J. Pirotta*
Camilleri Emanuel	*The Teaching of English in state infant classes: An Analytical Study.*	*Mr. D. Cuschieri*
Cassar Margaret	*Maria: The First Five Years.*	*Prof. J.M. Falzon*
Cortis Angela	*A Study of the performance of a group of young children non-verbal tests.*	*Prof. J.M. Falzon*
Cutajar Alexandra	*Towards a developmental process for the introduction of English to Maltese school children.*	*Dr. M. Azzopardi*
Decelis Patrick	*The use of two intelligence tests with maltese children Year 6.*	*Prof. J.M. Falzon*
Delceppo Ruth	*The acquisition of English phonology by the Maltese Child.*	*Dr. M. Azzopardi*
Ebejer Gladys Vella Rita	*'O' level English Literature: Relevance and Enjoyment.*	*Dr. P. Vassallo*
Farrugia Rita Mifsud Elizabeth	*'Learning through Play'.*	*Prof. J.M. Falzon*
Formosa John	*A Study of the views teachers in the profession have of Education.*	*Mr. J. Fenech*
Gravina Joseph	*Educational relevance of Antonio Gramsci's Political writings.*	*Dr. K. Wain*
Falzon Denise	*New Approaches in History Teaching: The megalithic temples of Malta as a case study.*	*Mr. M. Sant*
Grixti Alfred	*The future of P.T.A.'s in Malta Community Schools.*	*Mr. C. Calleja*
Meilak Christopher	*Un'analisi degli errori ortografici, morfosintattici e lessicali commessi in italiano da cento studenti maltesi.*	*Dr. J. Eynaud*
Treeby Michael Muscat Ray	*TV programmes: The effect of age, sex and level of educational attainment.*	*Prof. J.M. Falzon*
Pace Terry	*Reading Abilities of a small group of normal and hearing impaired child.*	*Dr. M. Azzopardi*
Randon Christopher Pirotta Liliana	*An Analysis of Two Annual Examinations in Accounts.*	*Mr. S. Debono Mr. S. Gauci*
Scerri Antoinette Debono Marianne	*L-Ikel u Saħħitna.*	*Ms. J. Pullicino*
Tanti Michael	*Manuale di lingua italiana per discenti maltesi di prima media.*	*Dr. J. Eynaud*
Xuereb Lorraine	*A study of the basic positions and movements in ballet and how these can be applied and modified for the teaching of gymnastics in secondary schools.*	*Ms. L. Azzopardi*

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Asciak Kevin	*Arithmetical Differences of Form V level.*	*C. Axiak*
Azzopardi Catherine	*Aspetti Lessikali tal-Malti fil-Matrikola (fil-komponiment).*	*E. Fenech*
Bezzina Saviour	*Social Relations in a Secondary School.*	*Mr. J. Fenech*
Bonanno Henry	*The Biology of Orchids with reference to those from the Wied-il-Kbir system.*	*Mr. E. Lanfranco*
Bonanno Stephen	*Żviluppi Moderni fin-Narrativa Maltija.*	*Dr. O. Friggieri*
Borg Andrew	*The Influence of Television on Maltese Adolescents.*	*Mr. M. Borg*
Borg Carmen (Sr.) Debattista Grace (Sr.)	*Reward preference in the Primary and Secondary Class.*	*Prof. J.M. Falzon*
Borg Charles	*Tas-Silġ Archaeological Site: Teaching Kit catalogue.*	*Dr. A. Bonanno*
Borg Charlotte	*The communicative approach in the Maltese Primary Schools - A projective view.*	*Mrs. M. Azzopardi*
Brockdorff Adrianne	*Children' understanding of Measurement: Form I to Form V.*	*Mrs. C. Axiaq*
Calleja Marisa	*A Study of Stress and Rhythm as used by Maltese Speakers of English.*	*Mrs. M. Azzopardi*
Callus Mary	*Educational Resources for Primary Schools B's.*	*G. Bonnici*
Camilleri Antoinette	*Language Education and Socialization in Mgarr.*	*A. Borg*
Camilleri Maria	*Dickens' Portrayal of Children.*	*P. Vassallo*
Cassar Mary Anne	*The Construction of Sentences in the second language of children aged between 5 and 7 years.*	*H. Schembri*
Cassar Wilfred Diacono Vincent	*Analisi to' xi żbalji, l-aktar dawk ortografiċi, fl-eżami tal-Malti I Matrikola Ordinarja Ġunju 1983.*	*M.R. Gatt*
Chircop John	*The Left within the Labour Movement 1926-1933.*	*D. Fenech*
Dalli Maria	*Story telling: A communicative Approach in Teaching Young Learners.*	*D. Cuschieri*
Debrincat Rita	*Kindergartens in Malta.*	*G. Bonnici*
Dimech Paula Gruppetta Rosette	*A study in some types of deviant behaviour in the school among 14-16 year old girls.*	*K. Wain*
Ellul Dawn	*The Place Maltese: Evaluation of trends and participation.*	*L. Azzopardi*
Farrugia George	*Aspetti Lessikali tal-Malti fil-Matrikola ordinarja u avvanzata (fit-traduzzjoni).*	*E. Fenech*
Formosa John	*Il concetto della patria nei poeti maltesi in lingua italiana del primo novecento.*	*O. Friggieri*
Frendo Joy	*Music through movement.*	*M. Azzopardi Barbie*
Grech Raymond	*Orjentamenti reliġjużi ġodda fil-poeżiji moderna maltija.*	*O. Friggieri*
Grima Maria	*Computers for schools: Malta A Case.*	*L. Sant*
Harrison Michael	*La Place Accordes a la civilization francais dans la france en direct (Niveau 1 et 2).*	*L. Seychell*
Micallef Bernard	*Ħjiel ta' Realiżmu fil-letteratura maltija: Guże Chetcuti*	*O. Friggieri*
Micallef Joseph	*I programmi televisivi italiani come sussidio nell' insegnamento dell'italiano.*	*J. Brincat*
Micallef Ronald	*The role of a teacher's union in the national educational system.*	*J. Lauri*
Mifsud Charles	*The moral judgement of maltese 12 and 14 years olds.*	*J.M. Falzon*
Mifsud Dione	*The Rebellion of the Knights against Grandmaster Jean Lavasquer de la Cassieri.*	*G. Wettinger*
Pace Mario	*Indagine sulla diffusione della lingua e della cultura italiana tra i discenti delle scuole elementari, scuole medie e scuole medie superiori maltesi.*	*J. Eynaud*

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Portelli Georgia	*Esperienze e techniche dell' insegnamento dell'italiano in zone bilingue e dialetto-fone. L'applicabilità di dette alla situazione maltese.*	*J. Brincat*
Sammut Briffa Bernardette	*Fourth Formers view and attitudes towards school and the teacher.*	*C.J. Farrugia*
Schembri Nathalie	*The theme of art and the artists in John Fowles's Mantissa.*	*P. Vassallo*
Sciortino Grace	*An Evaluation for new Science Worksheets (1985) for Form I.*	*F. Ventura*
Sollars Alexandra	*Readability of Science Text Books in Form 1 and 2.*	*F. Ventura*
Sollars Valerie	*Children's wishes.*	*J.M. Falzon*
Spiteri Mario	*The Study Habits of Maltese students education in Malta.*	*J.M. Falzon*
Stilon Philip	*Drama in the Primary Schools.*	*J. Pirotta*
Vella Mary Rose	*The Importance and Validity of P.E. in the Primary School.*	*L. Azzopardi*
Vella Peter Paul	*Dun Ġorġ - Kittieb, Għalliem, Riformatur.*	*O. Friggieri*
Vella Sandra	*Maltese Children telling stories.*	*A. Borg*
Zammit William	*Fra Tommaso Gargallo, Bishop of Malta.*	*G. Wettinger*
Zarb George	*Sex and Personality Differences in Performance on Mathematics Tests in 11-year old children.*	*M. Borg*
Philipov Vladimir	*Discourse Intonation of negation in English and Bulgarian: A contrastive analysis.*	*M. Azzopardi*

NOTE ON CONTRIBUTORS

The articles presented in this issue are the work of students of the Faculty of Education. In the majority of cases the articles are a digest of the dissertation submitted by the students concerned as part-fulfilment of the course requirements.

These theses are the result of close collaboration between tutors and students and constitute very useful research on the teaching situation in Maltese schools. Appended to these articles is a list of theses which can be viewed by the general public on request.

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PROCEEDINGS OF A NATIONAL WORKSHOP FOR FURTHER TRAINING OF EDUCATIONAL ADVISERS AND SCHOOL PRINCIPALS IN MALTA

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With an introduction and report
by CHARLES J. FARRUGIA

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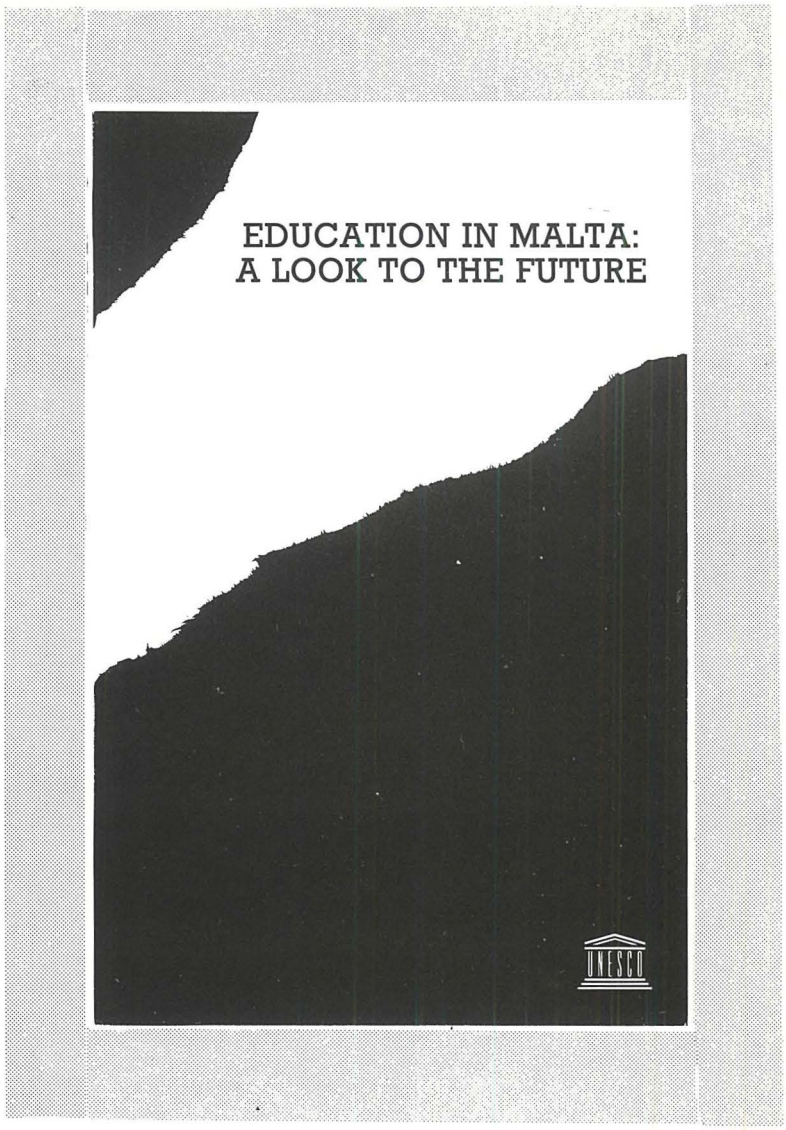

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