EDUCATION

Contents

EDITORIAL
Charles Mifsud

Schools *do* make a difference

In the 1960's and 1970's considerable emphasis was laid on the importance of social class and family background on children's achievement at school. The role played by schools was minimised. However, in 1979 the study *Fifteen Thousand Hours: Secondary Schools and their Effects on Children* by Michael Rutter *et al* brought schools to the forefront as it attempted to show differences in the outcomes of different schools. The questions were and to a large extent still are: Are some schools more successful in promoting the learning of pupils from a similar background? What are the characteristics of successful schools? What should other schools learn from these? In the same year as the publication of the Rutter study, Edmonds came up with a 'Five Factor Theory of School Effectiveness'. The factors were high expectations for the students; highly committed staff; frequent monitoring of students; an orderly and secure environment; and emphasis on basic skills. These five characteristics of effective schools have been widely revisited and adapted. Later research has added other characteristics like: 'professional leadership', 'good links with parents' and an 'atmosphere conducive to learning'. The identification of key factors shared by many effective schools does not make the transplanting of these to other less effective schools any easier.

School Improvement

The onus of the responsibility for improvement has to be taken on board by the school itself with support from the centre. Attempts at improving schools, which are wholly managed from the centre, are often less effective than initiatives taken in one school. Improvements implemented from the top are bound to become diluted and distorted as they filter through to the classroom level. What happens within the school is more influential than central government policies. The traditional way of attempting to improve teachers' professional practice through in-service education, by training one person from each school to disseminate to the others, has often been found to be short-lived and highly limited.

It is better for the whole school to be the unit of change and for the whole staff to assume responsibility for school improvement. Perhaps this can form the basis for a clear vision of our educational enterprise into the new millenium. Our schools should be supported to mobilise themselves and all their energies and resources to provide a value-added educational experience to the students within their care.

Effective teachers

Research into teachers and teaching methods has often been presented as a battlefield between two different camps: the 'traditional' and the 'progressive'. However, it appears that success could come from either. It is not easy to distinguish between the two as there can be a great deal in common between them. Teachers need a mix of approaches to suit their own style and that of the students. We need to keep looking for ways to increase the status and morale of teachers and investigate alternative models of teacher continuing education. Effective teaching needs to be framed on the basis of research on good classroom practice. To this end Education 2000 seeks to bring to the attention of Maltese and Gozitan educators brief reports of research developments in education. Also, the Faculty of Education has embarked on a series of education research seminars which should provide opportunities for reflection on a number of crucial issues.

Now that the Faculty of Education has introduced a new course structure for its initial teacher education degree courses, it is important that we engage in a process of evaluation and reflection. This should enable us to evaluate the impact of this new course structure on the effectiveness our students and the Maltese educational system at large.

New working structures

We need to investigate new structures for working alongside our main partners: the Education Division, schools, etc. in order to ensure that expertise and resources are not dissipated. This is not easy as different partners may have different agendas. However, we need to create appropriate structures so that we can move forward together and ensure that we are not working at cross-purposes. It is clearly evident that only through some form of co-operation and pulling together that the best interests of our students and schools can be served into the new millenium.

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MEDIA WORKSTATION
Photocopying halftones

Ġorġ Mallia

Photocopying handouts seems to have become an integral part of the teacher's day. With photocopiers and image reproducers slowly becoming indispensable tools that all schools aspire to have, the teacher's need to supplement the text book, or to tailor-make material to personal approaches has found a helpful ally.

However, in the majority of cases, the handouts leave a lot to be desired.

First of all, in most cases, the handout is pasted up, with bits and pieces cut up from different sources. Most of these are definitely not the most homogeneous in nature (texture, grading, density, etc.), and when stuck together form a rather unseemly whole, with parts photocopying too darkly, and others less so to the point of illegibility.

Even so, that is not the greatest problem. The main difficulty is in photocopying continuous tone, actual photos, or, even worse original or printed colour photos.

It is not the intention of this piece to be too technical, suffice it to say that the nature of photocopying is such that the highlights of any continuous tone photo are emphasised, while the lowlights are dropped out, resulting in something like the example in *Fig. 1*.

> **❝ The main difficulty is in photocopying continuous tone, actual photos, or, even worse original or printed colour photos ❞**

Fig. 1 The b/w or colour photo pasted up and photocopied, resulting in high contrast

If line drawings, toned in illustrations (using transferred dotted screens to shade in the "gray" areas), or highly contrastive pictures can be used, reproduction should be fine. However, if the exercise in the handout depends on the recognisability of the graded tone photo, pictures akin *Fig. 1* are not adequate.

So what can the resourceful teacher do to get recognisable photos on his/her handout?

Mainly, two things. In the first case, a lot depends on the teacher having access to a computer, scanner and laser or ink-jet printer.

The computer and the laser printer are the expensive ones, scanners and ink-jet printers can be acquired for little, nowadays. Once you are all geared up, familiarise yourself with the software (usually very user friendly, see *Fig. 2*), and you are ready to start scanning.

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Fig. 2 - Typical scanning software. Note that the picture is being scanned as a black and white photo, at a resolution of 300 dots per inch, at the same size as the original
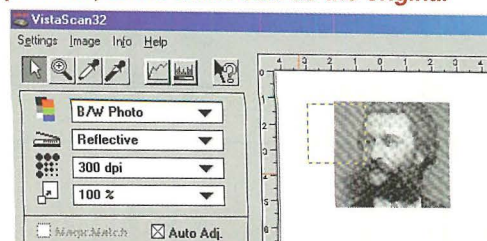
Resolution

What is important for the teacher to have is a working knowledge of resolution.

We calculate the resolution of a scan for printout in Dots Per Inch (DPI), or Lines Per Inch (LPI), while the resolution of an image on a monitor is calculated in Pixels Per Inch (PPI).
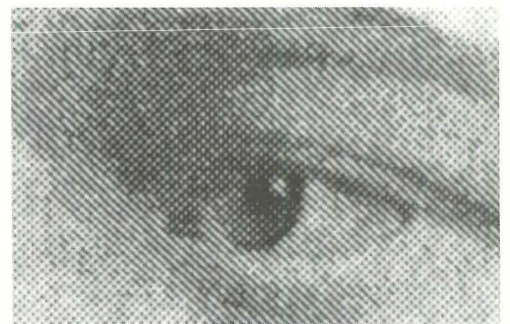
Fig. 3 - Note that what looks like normal graded toning in Fig. 4 is actually a matrix of graded dots that create the illusion of continuous tones

A lot depends on the output resolution of your printer. Most economically accessible laser printers at the point when this is being written average a 600 DPI printout, though 300 DPI laser printers are still available. The 300 DPI laser printer produces a large halftone dot, apparent to the naked eye, but which lends itself very well to 'normal' photocopying, with the copy losing very little from the original. The higher the resolution from than on, the more the possibility of contrasts and dropouts. Ink-jets are also suitable. Print out and stick on (if not using full-screen composition).

The other alternative is finding b/w pictures that have already been scanned and printed out, as in relatively low resolution newspaper and low-grade paper magazine photos.

Fig.4 is the result of the above efforts.

Fig. 4 - A 300 DPI scan, (though in this case output at a much higher resolution), reproduces well on photocopiers

Further reading

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Practical Work in Science

Deborah Chetcuti

Practical science, by which we mean the doing of experiments or practical exercises with scientific apparatus, usually in a science laboratory, has established a large and influential place in the science teaching of many countries (Woolnough, 1991). Practical work is considered important because it provides a means for children to investigate their world and develop a number of skills.

As outlined in the report Science for All Americans and Project 2001, the main aims of practical work are :

1. **to simulate interest and enjoyment;**
2. **to teach laboratory skills;**
3. **to teach processes of science;**
4. **to assist in learning scientific knowledge.**

The emphasis is on teaching science as a process rather than simply as a body of knowledge.

In Malta practical work has also become an integral part of the teaching of science especially since the introduction of a practical component in the Secondary Education Certificate Examinations held at the end of students' secondary schooling. In fact since 1994, students sitting for their SEC examination in Biology, Chemistry and Physics have to present fifteen experiments which have been assessed by the class teacher to the MATSEC Board. This teacher assessment of practical work then contributes 15% to the final mark in the examination. According to Sultana (1996) this has led to more importance and attention being given to course work as a legitimate component in the continuous assessment of students and to the establishment or better resourcing of laboratories in schools.

This is an important implication of the introduction of practical work as part of the SEC examinations in science. However, while no one can dispute the important aims of practical work, I was concerned about whether the aims of practical work were actually being reached. As stated by Woolnough (1991) practical work involves teachers in a vast amount of time, effort and expense and yet it is possible for this work to be unfocussed and unfulfilling involving much activity but little benefit.

As Woolnough continues to argue we need to be very clear about the aims of practical work and we need to ask hard questions about its efficacy.

> **❝The emphasis is on teaching science as a process rather than simply as a body of knowledge❞**

Teachers' and students' views of practical work

In a number of interviews carried out with teachers and students in different schools representing both Private and State schools and both girls' and boys' schools it was very clear that practical work was considered to be very important both by teachers as well as students. As stated by one teacher:

> *…you cannot teach a science unless they have hands on experience. I was one of the first group of girls to study physics…we had labs but we never did practicals until a certain teacher came along and he took us to the lab…I'll never forget my first experiment was with the simple pendulum…this shows how important it is to handle apparatus…the students really enjoy it especially when they're working for themselves…*

Although this is the view of only one teacher it echoes the views of a number of teachers interviewed who all considered practical work to be very important. Similarly Diane, a student interviewed expressed the views of other students when she said that:

> *…I really like them…at least you get to do something yourself not always the teacher talking…and they really help you to understand things better…*

Yet despite the fact that everyone agreed on the importance of practical work, there were still a number of problems and difficulties which teachers had to face in the implementation of the practical work. The fact that the practical work had to be assessed was also creating more pressure on teachers.

Problems in carrying out practical work

The teachers interviewed described a number of problems which they were facing when it came to carrying out practical work. These included:

1. Lack of resources.

Most of the teachers interviewed complained that they did not have the necessary

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Practical Work in Science

rescurces and equipment to carry out practical work. Although in some schools this did not seem to be the case. As stated by a teacher in a State Junior Lyceum for boys:

…maybe in this school we're a bit privileged because we have the apparatus and the technicians…what I hear from other schools is that they find it difficult to do the practicals because of lack of apparatus and technicians…

In another school the situation is not so privileged and the teacher stresses that lack of resources do not in fact allow her to carry out practical work:

The biggest problem which I am finding is with the practicals. There is no equipment and no apparatus. And for example when I go into the laboratory I do not find anything prepared. I have to prepare things myself. The cupboards do not open and we have to stay looking for the apparatus ourselves…the lab is just benches and stools…you can come and look for yourself. I am experiencing a lot of practical difficulties and I want you to see this for yourself…because some people they come in here and they do not think it can be so bad..

2. Time management

Another problem which is also described by Klanin (1991) as being one of the major difficulties with practical work is that the organisation of a practical involves a great deal of time, time is needed to set up apparatus and equipment especially if there is no technician available in the school. Time is also needed to be with the students during the practical and more time is needed to actually mark the write ups done by students during the practical. This has assumed even more importance due to the fact that

assessment of practical work has to be handed in to the MATSEC Board. As stated by a teacher:

It really takes a lot of work to correct the practicals…some teachers just look and give a mark…The practical is very important but really it depends on the teacher. If you take a lot of time on the practical work there is less time for theory. The teachers are really being stretched and that's why in the end you just end up looking at the practicals rather than only marking them. Ideally the student should discover from experiments but the teacher is really "imsallab" and it is difficult to really do everything.

3. Student participation

One thing which students have to do at the end of a practical session is to produce a report of what they have done during the practical. Many students find this very difficult especially since the report has to be written in English. While they enjoy actually doing the practical, they do not enjoy the writing up. This is described by a teacher who says:

…yes we manage the practicals although it's a joke in the sense that these kids are not coached enough…they are not capable of being left on their own to write down the method…aim…mostly you end up writing it on the blackboard and they just try out the experiment…and then they write down the results…

As stated by Janet in an area secondary school, *"…I'm not capable of explaining it…it's okay if I do it but to explain it is difficult…".* This leads to both frustration both for the student and the teacher and acts counter to the actual enjoyment of carrying out a science activity.

4. Assessment

One of the major difficulties faced by the teachers interviewed was the assessment of the practical work. First of all the difficulty is on what to base the assessment. As stated by one teacher:

…If they are weak and you are just going to assess them on the write up…then sometimes this does not reflect what they really know because in the lab they would have done all the experiment…

The dilemma is on what criteria to actually give students a mark which they will have to carry forward to their final examination.

Other problems created by the fact that practical work is assessed include the issue of uniformity and reliability. The teacher assessment is very subjective and one teacher marks differently from another teacher. One teacher echoed the concerns of a number of teachers regarding this issue:

I think that in the course-work there should

be much more uniformity…for example in our school we do about 30 practicals but I know that in some schools, they only do 5. Some can be copied and the way in which I mark is not the way in which another teacher marks…there is a lot of teacher subjectivity. I know that this is done to help the student…but there are a lot of students who continue to fail anyway…

Apparently there still seems to be a problem about what should be assessed and how. This lack of agreement leads to the disillusionment of teachers with the kind of practical work being carried out in schools.

Final reflections

What the introduction of practical work as part of the SEC syllabus has done is to increase the amount of practical work being done in schools and as stated by one teacher, *"…it has helped for them to like the subject and for them to enjoy it better…".* I do not intend to offer solutions as to how an ideal practical can be set up but I have only tried to raise a number of questions through the voice of a number of teachers about whether the aims of the practical work are being reached and whether students are gaining the skills which they were intended to. Questions also need to be raised about the quality of the practical work being carried out in schools and the degree of actual student involvement and participation in the practical work. Finally serious rethinking has to be done about the efficacy of actually assessing practical work in a formal manner. While the giving of feedback to students regarding their practical performance is an integral part of teaching and learning, having a formal mark which has to be presented to an examination board creates more pressure on teachers and students. The main aim of practical work is to stimulate and encourage students' interest in science. What needs to be created is an environment where both students and teachers can enjoy a practical activity and learn something from it. This is a formidable agenda and all I hope is that this short reflection on the difficulties encountered in carrying out practical work can act as a springboard for further discussion and reflection in order to further improve the teaching of the practical science in which we all believe.

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Examining correction

Doreen Spiteri

Teachers correct. That is part of our job and an integral part of it too. However some teachers might feel that this is the one aspect of the job that they dread and find most disheartening. Why don't students learn? Why do they make the same mistakes[1] we find ourselves asking? Some other questions we might like to put to ourselves are: does correcting really do students any good? What happens to the corrections we make? Can anything be done to break the deadlock of unheeded corrections?

> **❝Why don't students learn? Why do they make the same mistakes we find ourselves asking?❞**

This article looks at the thinking and values that underlie our practice of correcting and suggests looking at correction as a form of continuous assessment that is of value for both teacher and learner. A suggestion is made for this to be done more efficiently both in terms of teacher-time and learning potential. For reasons of space I will only look at correcting extended writing.

Why we do the things we do

Teachers' reactions to mistakes differ. Some feel they should correct every mistake, others might turn a blind eye to many, while others still might select mistakes common to many students and discuss these in class. Different attitudes that have one thing in common: they reflect our implicit and explicit beliefs about ourselves as language teachers and about the nature of language learning in general. And these reasons go to the core of what it is that we do in class. Our reaction to students' mistakes therefore bears some reflection.

As teachers we might see ourselves as givers of all information, as the ones with the corrections to students' mistakes. Therefore we conscientiously correct the incorrect and cross out, underline, re-write, refine. We may be reluctant to do otherwise because we feel we are sending students the wrong feedback if mistakes are left uncorrected. We may in fact see ourselves as promoters of accuracy and desire learners to reach that goal. We might also be using our ability to correct as a form of pressure to reinforce the power divide between us and the learners, or give learners the impression of doing so.

Another set of assumptions that may underlie our attitude are those related to the nature of language learning. We may consciously or unconsciously believe that learning is a straightforward process: teachers teach, learners learn. This implies a belief that what has been learnt cannot be forgotten, that learners build continuously on prior knowledge and that they will pick up on the point corrected and not do it again.

So far I have made the point that whatever we do as teachers is underpinned by a theory which may be principled or otherwise, and explicit or otherwise. For this reason some clarifications need to be made with regards to the preceding paragraph.

The process of building on what one has learnt does take place to an extent; however, language learning is not solely linear and additive. It is also cyclical, and learnt structures and vocabulary can be forgotten if the learning process does not make them memorable and the passage from the short-term to the long-term memory does not take place. It is beyond the scope of this article to go into methodological issues though clearly these are the crux of the matter.

Regarding the other set of assumptions dealing with our self-perception as teachers, we might wish to see ourselves as informed facilitators who promote learner independence and autonomy rather than the providers of knowledge.

The heart of the matter

The question remains: What does one do? How much to correct? What works, what does not?

A basic tenet that should be stated at this point with regards to correction is that the work we assign should be related to the teaching that preceded it. If students are assessed on material they have just covered, this should go some way towards reducing our correction load.

Back to our problem: How best to correct? It is a question that has more than one answer because it is dependent on some factors: how old are the students? How long have they been studying English? What level of proficiency have they reached? How motivated are they? What purpose are they learning English for? Answers to these questions should guide our practice and we should bring our professional judgement to bear on the issue.

One thing is certain, extensive correction and copious re-writing strike a deadly blow to motivation and confidence that return to plague us because unmotivated and indifferent learners we can well do without.

Correction code

One way of correcting which allows teachers to fulfil their role and encourage learners to take some responsibility for their learning is to use a code. It is a simple strategy and work like this. In the margin on the students' written work, the teacher notes the

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type of mistake, and, optionally, marks where the mistake lies. For example:

sp	p	On friday, afternoons
		I take care of
voc		my small sister. My mother thinks I am
sp		responsable enough now that I
gr		have thirteen
↑		years ↑.

A code can include the following and can be modified to suit both teachers' and learners' needs.

gr   = grammar
( )   = unnecessary words
w.o. = word order
p   = punctuation
t   = tense
prep = preposition
voc = vocabulary
↑   = word missing
sp   =spelling
//   = start fresh paragraph
rep = repetition

Putting it in action

The work is returned to the student who uses a dictionary or the class textbook, or checks with other students (through pair work or group work) to solve the problems pointed out by the teacher. The teacher is the last resort.

The dynamics of this will need to be adjusted to the particular classroom situation. This stage where students attempt to correct their own mistakes can be carried out in class while the teacher moves from desk to desk guiding students. Alternatively the students can do this at home.

For assessment purposes we would then need to decide how to assign a mark. We could mark the work first time round with a preliminary mark, and a second time after it has been revised. This can have the benefit of students seeing their mark raised if they manage to put right most of their mistakes.

Marks can also be withheld until the finished product is handed in.

If we embark on the use of such a code, this should be explained to students and probably they will need to copy it down in their composition or writing copybooks for easy reference. The use of such a code does not cover all that we may wish to correct, but it does get a lot of the mechanical mistakes out of the way. It does not for instance work for unidiomatic phrases and sentences. For example, a phrase like she jumped for her head (she dived into the sea) cannot be broken down into bits but the whole phrase will need to be marked off and shown as incorrect and probably the correct lexis provided by the teacher.

Moreover, with low level learners of English whose work will contain a fearful number of mistakes and errors, the code might be overwhelming. In such cases it is best to focus on some of the problems at a time rather than attempt to correct everything that is wrong. In this way we set limited learning objectives each time.

There is also the issue of how often will the teacher look at the same piece of writing. Some thinking and planning will need to be done so that correction loads will not be staggering.

Conclusion

There are however a number of advantages in using a code namely, it:

✓ is less time-consuming for teachers
✓ encourages study skills in learners and promotes use of resources
✓ develops the skills of editing and drafting
✓ encourages students to focus on mistakes
✓ is motivating especially if work is marked after the student has revised own work
✓ provides feedback to teachers regarding effectiveness of teaching.

Endnote

[1]It is customary to define "mistake" as something the learner knows but has not put into practice. On the other hand, an 'error' is made when the learner attempts something and gets it wrong.

References

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> 66 This article suggests looking at correction as a form of continuous assessment that is of value for both teacher and learners 99

Whatever we do as teachers is underpinned by a theory which may be principled or otherwise, and explicit or otherwise

Photo taken at Sir Adrian Dingli Junior Lyceum by *Alfred Cauchi*

Il-Moviment tal-Konsumatur

Joyce Borg

L-ewwel miżuri li nafu bihom li kienu jħarsu l-konsumatur insibuhom fil-liġijiet Bibliċi madwar is-sena 1400 qabel Kristu fejn dawn jiddiskrivu kif għandhom jintużaw imwieżen u piżijiet ġusti. Il-*Magna Carta* ta' l-1215 tistabilixxi l-kejl ta' l-inbid, il-birra, il-qamħ u d-drapp. Min kien jażżarda jagħti bin-nieqes kien jiġi penaliżżat u f'ċerti każijiet anke imsawwat. Imbagħad insibu li fl-14 u l-15 il-seklu kienu jittieħdu passi serji anke kontra dawk li jagħtu bin-nieqes fil-piż ta' l-għasel, il-melħ, il-hut, il-faħam u l-ġobon.

> **❝Aktar ma beda jgħaddi ż-żmien aktar bdiet tinħass il-ħtieġa li l-konsumaturi jingħaqdu biex isemmgħu leħenhom❞**

Iżda ġara li mar-Rivoluzzjoni Industrijali fejn il-makkinarju kien daħal sewwa bħala mezz ta' produzzjoni u ġew stabbiliti l-korporazzjonijiet il-kbar, ma kienx biżżejjed li l-konsumatur jiġi mħares b'dawn il-liġijiet biss. B'din il-bidla il-konsumatur sab ma' wiċċu numru kbir ta' prodotti u servizzi li nbigħu b'mod li jkun diffiċċli wieħed jiġġudika l-kwalità u xi kultant m'huwiex faċli għall-konsumatur jekk ma jkollux ċertu tagħrif biex jagħmel l-aħjar għażla.

F'din is-sitwazzjoni u aktar ma beda jgħaddi ż-żmien aktar bdiet tinħass il-ħtieġa li l-konsumaturi jingħaqdu biex isemmgħu leħenhom. Kien proprju mitt sena ilu li n-nisa fl-Amerika waqqfu għaqdiet tal-konsumaturi magħrufa bħala *the National Consumers' League*. Imbagħad 15 ta' Marzu, 1962 il-President J.F. Kennedy li ddikjara uffiċċjalment l-ewwel erba' drittijiet bażiċi fil-15 ta' Marzu, 1962 li kienu: id-dritt għas-Sigurtà; id-dritt għall-Informazzjoni; id-dritt għall-Għażla; u d-dritt li jsemma leħnu. Wara il-President Gerald Ford żied id-dritt għall-edukazzjoni tal-konsumatur.

Fl-Ingilterra nsibu il-moviment tal-kooperattivi li ħadem bla heda f'ħafna oqsma sabiex iħares il-konsumatur. It-twaqqif tal-*Co-operative Party* fl-1917 li kienu membri fil-*House of Commons* u aktar tard fil-*House of Lords* introduċew sensiela ta' liġijiet li jħarsu l-konsumatur. Kien imbagħad fl-1957 li ġiet imwaqqfa l-*Consumers' Association* fuq bażi volontarja bil-għan li ttejjeb u zzomm il-livell tajjeb tal-prodotti u servizzi. Dan tagħmlu billi tippublika l-magazine tagħha **"Which";** tittestja prodotti f'laboratorji indipendenti, u tikkonsulta speċjalisti. Din l-Assoċjazzjoni hija mmexxija minn Kunsill volontarju u ndipendenti fejn l-ebda membru tagħha m'għandu x'jaqsam ma' l-industrija, ma' l-irriklamar; jew ma' min imexxi xi negozju.

Fl-Iżvezja l-moviment tal-konsumatur nibet fit-tieni gwerra dinjija fejn il-flus u r-risorsi kienu skarsi. Għalhekk il-Gvern ħass il-ħtieġa li barra jirregola l-prezzijiet jikkontrolla r-risorsi u jeduka l-konsumatur. Fl-1940 waqqaf uffiċċju magħruf bħala *"Active Housekeeping"* biex jimmobilizza l-opinjoni pubbliku u jgħin lill-familji jagħmlu l-aħjar użu mir-risorsi li kellhom. Dan l-uffiċċju kien jaħdem mill-qrib man-nisa u l-organiżazzjonijiet ta' l-għalliema tal-*home economics*. Aktar tard dawn in-nisa u għalliema waqqfu l-*Home Research Institute*

bil-għan li jagħmel riċerka; jittestja u jiżviluppa prodotti. Fin-nofs tal-ħamsinijiet dan l-istitut ingħaqad mal-*Active Housekeeping* u ġie ffurmat the *National Institute of Consumer Affairs*. Fl-istess zmenijiet twaqqfu wkoll n-*National Consumer Council* u l-*Institute of Informative Labelling*. Ta' l-aħħar parti minnu huwa ffinanzjat mill-Gvern biex jistabillixxi l-aħjar metodi ta' l-ittikketjar b'informazzjoni utli dwar il-prodotti. Wara l-gwerra fejn is-sitwazzjoni ekonomika mbagħad tjiebet u żdiedu l-prodotti fejn ir-reklamar beda jinfluwenza l-konsumatur fix-xiri tiegħu, kien ovvju li l-konsumatur għandu bżonn l-għajnuna ta' esperti u protezzjoni minn metodu qarrieqa ta' kummerċ. B'hekk żviluppaw u ġew introdotti liġijiet li jħarsu l-konsumatur. Fis-sittinijiet għaqdiet tan-nisa u *trade unions* iffurmaw kumitati lokali madwar il-pajjiz kollu biex jgħinu lill-konsumaturi fil-problemi tagħhom u jgħaddulhom it-tagħrif meħtieġ. Dawn il-kumitati għaddew taħt it-tmexxija tan-*National Consumer Council* u għadhom sa' llum jipprovdu dawn is-servizzi. Fl-istess waqt twaqqaf ukoll il-*Consumer Complaints Board* taħt it-tmexxija tan-*National Consumer Council*.

Il-*Consumers International* hija għaqda dinjija li taħdem bla qliegħ u li ġiet imwaqqfa fl-1960 fl-Olanda. Dak iz-zmien kienet magħrufa bħala *Organisation of Consumers Union*. din il-Federazzjoni ta' Għaqdiet tal-Konsumaturi hija mpenjata biex tħares u tmexxi ċl quddiem l-interessi tal-konsumaturi mad-dinja kollha permezz tat-twaqqif ta' istituzzjonijiet li jħarsu l-konsumatur u tieħu sehem f'laqgħat fejn jittieħdu deċizjonijiet li jistgħu jaffetwaw lill-konsumatur. Din l-Għaqda żiedet tliet drittijiet oħra d-dritt għall-bżonniijiet bażiċi; id-dritt għall-ambjent b'saħħtu; u d-dritt għall-kumpens. Bħalissa din għandha 245 membru li ġejjin minn 110 pajjizi.

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Dan huwa messaġġ bi ħlas

Il-parteċipazzjoni tal-ġenituri u r-riċerka fl-iskejjel

Carmel Borg

1. Introduzzjoni

Il-Kurrikulu Minimu Nazzjonali jqis ir-riċerka interna (*action research*) bħala l-perm li fuqu jrid idur l-iżvilupp tal-kurrikulu fl-iskejjel. Taqsima 6.11 torbot ir-riċerka ma' l-għarfien tal-ġenituri bħala msieħba ewlenin fil-proċess edukattiv. Paragrafu 6 11.2 jagħti ħjiel dwar kif il-ġenituri jistgħu jsostnu l-kurrikulu. Fost il-lista ta' possibilitajiet il-paragrafu msemmi jħeġġeġ lill-ġenituri biex jipparteċipaw f'proġetti ta' riċerka li jwasslu biex jitjiebu s-servizzi u l-ħajja edukattiva ta' wliedhom. B'dan il-mod id-Dokument qiegħed jissiġilla l-bżonn li l-iskejjel iwieżnu d-direzzjoni tagħhom b'informazzjoni preċiża rigward l-oqsma differenti ta' l-operat tagħhom u jżewġu mal-fatt li l-ġenituri huma għajn ta' nformazzjoni mportanti f'dan il-qasam tal-proċess edukattiv.

2. Ir-Riċerka Interna

Ir-riċerka interna tibda b'inizjattiva individwali jew kollettiva ta' għalliema jew imsieħba oħra fl-iskola. Ix-xrar li jkebbes l-interess fl-użu ta' din il-metodoloġija ta' stħarriġ jista' jvarja minn bżonn ta' tfassil ta' politika dwar il-parteċipazzjoni tal-ġenituri fl-iskola għal osservazzjoni magħmula minn xi ġenituri waqt waħda mil-laqgħat ma' l-amministrazzjoni ta' l-iskola. Huma x'inhuma l-għejun tat-tnebbiħ, ir-riċerka interna hija waħda mill-metodi ta' stħarriġ l-aktar effettivi f'kuntest ta' skola li tkun qiegħda tanalizza sitwazzjoni konkreta fil-perimetru tagħha jew fil-komunità li tħaddanha.

Ir-riċerka interna ssir bl-għan li titjieb parti mill-operat jew l-operat sħiħ ta' l-iskola. Peress li l-azzjoni hija mibnija fir-riċerka l-proċess ta' l-istħarriġ joħloq ċirku prassjali fejn ir-riċerka u l-azzjoni jitwaħħdu fi proċess li jġib trasformazzjoni fis-sit.

Ideal importanti li jnebbaħ lil kull min juża r-riċerka interna huwa s-sens ta' komunità li tiġġenera l-ħidma kollettiva. Din ir-riċerka toħloq ambjent fejn diversi msieħba jkunu jistgħu jipparteċipaw b'mod attiv fl-iżvilupp ta' pjan ta' riċerka u azzjoni, fl-implimentazzjoni tal-pjan, fl-istħarriġ u l-analiżi ta' l-effetti tal-proġett ta' tiġdid, u fir-riflessjoni dwar dak kollu li jkun qiegħed jiġri. Dan is-sens ta' komunità huwa wkoll rifless fil-fatt li l-imsieħba kollha jinżammu infurmati bl-iżviluppi li jkunu qegħdin iseħħu b'riħet din ir-riċerka.

Il-letteratura internazzjonali f'dan il-qasam tgħarrafna li dawk l-iskejjel li addottaw dan il-mezz ta' żvilupp u tiġdid irrappurtaw titjib kbir fl-istima personali ta' l-għalliema, fil-kolleġġjalità bejn l-għalliema, fil-predispożizzjoni għall- esperimentazzjoni, fl-għarfien ta' l-importanza tar-riċerka għall-iżvilupp tal-kurrikulu, fl-għerf prattiku, fil-kwantità u l-kwalità ta' riflessjoni, fil-proċess ta' awtonomija vera miċ-ċentru tal-poter u fid-demokratizzazzjoni tar-relazzjonijiet soċjali fil-komunità edukattiva.

> **Ir-riċerka interna ssir bl-għan li titjieb parti mill-operat jew l-operat sħiħ ta' l-iskola**

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L-għarfien, t-tħaddin u t-tħaddim ta' din il-metodoloġija mill-iskola jiddependu ħafna minn kif l-għalliema jħarsu lejn l-operat tagħhom. Din il-metodoloġija żgur li ma tistax twarrad f'art skolastika fejn l-għalliema għadhom iħarsu lejhom infushom bħala messaġġiera ta' l-għerf. Taqsima 6.9 tal-Kurrikulu Minimu Nazzjonali tiddeskrivi l-ħmira li ssajjar għalliema kompetenti u effettivi. Fost il-lista ta' ingredjenti nsibu l-kontribut li l-għalliema kompetenti u effettivi jagħtu lis-sistema edukattiva permezz tar-riċerka, il-kitba, u d-djalogu intern u mal-massa. Ingredjent ieħor huwa l-għatx għall-iżvilupp kontinwu u għall-ħidma bi sħab ma' kollegi u nies oħra interessati fil-qasam edukattiv. Fl-istess taqsima nsibu li l-għalliema għandhom bżonn ir-riżorsi, il-ħin u t-taħriġ biex ikunu jistgħu jibnu infrastruttura kulturali u repertorju ta' ħiliet neċessarji biex proġett bħal dan ikun jista' jitwettaq minghajr skossi.

3. Ir-Riċerka Interna u l-Ġenituri - Eżempju

Mill-esperjenza personali nista' ngħid li r-riċerka interna qiegħda bil-mod issib post ċentrali f'xi skejjel tagħna. Dan li ġej huwa eżempju ta' inizjattiva individwali f'dan il-qasam. Din l-inizjattiva bdiet fl-1996. It-tema ċentrali ta' dan il-proġett ta' riċerka hija sehem il-ġenituri fil-proċess edukattiv.

Għalliem fi skola sekondarja tas-subien talabni ngħinu fi proġett li kellu l-għan li jżewweġ it-tisħiħ tar-relazzjoni bejn ġenituri u għalliema fl-iskola tiegħu mal-bżonn akkademiku li jikteb teżi. Żwieġ leġittimu u etiku, fejn l-għalliem-riċerkatur iddeċieda li jidħol f'relazzjoni simbjotika mas-sit li pprovda l-kuntest għar-riċerka. B'hekk, kemm is-sit kif ukoll l-għalliem-riċerkatur iggwadanjaw mir-riċerka.

Wieħed mill-aktar passi importanti f'kull proġett ta' riċerka interna huwa l-identifikazzjoni u l-artikulazzjoni ta' l-għanijiet ewlenin tar-riċerka. Mistoqsijiet li normalment

jistaqsu l-għalliema-riċerkaturi li jkunu deħlin għal din il-biċċa xogħol b'ġenwinità huma: x'qed iqanqalna biex nibdew din ir-riċerka? xi trasformazzjoni nixtiequ naraw fl-iskola tagħna? u kif se tintlaqat il-komunità ta' l-iskola bl-istħarriġ li se nagħmlu? L-eżerċizzju mnebbaħ min dawn it-tip ta' mistoqsijiet għandu jwassal biex l-għalliema-riċerkaturi jiċċaraw l-intenzjonijiet tagħhom u jiżguraw li l-proġett sejjer iwassal għal azzjoni konkreta. It-tmiem ta' dan l-eżerċizzju jintlaħaq meta l-għalliema-riċerkaturi jkunu f'qagħda li jidentifikaw u jartikulaw il-mistoqsija ċentrali tar-riċerka. Fil-każ tal-proġett ta' l-għalliem-riċerkatur li talabni l-għajnuna, il-mistoqsija ċentrali kienet: 'għaliex il-parteċipazzjoni tal-ġenituri fl-iskola fejn ngħallem hija daqshekk fqira?'

Pass ieħor ta' natura preparatorja huwa l-qsim tal-mistoqsija ċentrali f'numru ta' mistoqsijiet sekondarji. Dawn il-mistoqsijiet jgħinu lill-għalliema-riċerkaturi jiċċaraw aktar l-għanijiet tar-riċerka. Permezz ta' djalogu fit-tul ma' l-għalliem-riċerkatur wasalna għal dawn il-mistoqsijiet: Min huma l-ġenituri ta' din l-iskola? X'esperjenza kellhom tas-sistema edukattiva fi żmien li huma kienu studenti?' Kif iħarsu lejn l-edukazzjoni? Kemm huma kuntenti bl-iskola ta' binhom? Kemm jaħsbu li hemm komunikazzjoni bejnhom u l-iskola? X'kontribut qegħdin/jistgħu jagħtu fl-oqsma differenti tal-proċess edukattiv? Kif jaħsbuha l-ġenituri dwar l-aspetti differenti tal-parteċipazzjoni tagħhom? Min huma l-għalliema ta' din l-iskola? Kemm huma midħla tar-riċerka u l-letteratura dwar l-partecipazzjoni tal-ġenituri fil-qasam edukattiv? X'jifhmu bil-kunċett tal-parteċipazzjoni tal-ġenituri? Kif jaħsbu li għandha tissaħħaħ il-parteċipazzjoni tal-ġenituri fl-iskola?

L-iċċarar tal-mistoqsijiet ċentrali u sekondarji jwasslu lill-għalliema-riċerkaturi biex jibdew il-fażi ta' l-għażla tal-kampjun. Il-mistoqsija li l-għalliema-ricerkaturi

jikkunsidraw f'din il-fażi tar-riċerka hija: min se jkun involut fir-riċerka? Il-kampjun ta' l-għalliem-riċerkatur kien jikkonsisti fl-amministraturi, l-għalliema u l-ġenituri kollha ta' l-iskola.

Pass ieħor lejn il-ġbir ta' l-informazzjoni huwa l-għażla ta' l-għodda ta' l-istħarriġ. Il-letteratura internazzjonali f'dan il-qasam turina li l-fatt li l-għalliema-riċerkautiri jkunu qegħdin jiġbru l-informazzjoni mill-istess sit fejn jgħallmu jista' jpoġġihom f'sitwazzjoni diffiċli. Dan jiġri l-aktar meta l-għalliema-riċerkaturi jkunu qegħdin jiġbru informazzjoni sensittiva. L-għalliem-riċerkatur li talabni l-għajnuna ħass li l-kwestjonarju kien l-aħjar mod kif jevita dan l-inkonvenjent. L-ammont ta' nies involuti fir-riċerka u l-ħin għad-dispożizzjoni tiegħu kienu żewġ raġunijiet oħra li kkontribwixxew għall-għażla tal-kwestjonarju bħala l-għodda tar-riċerka. Ta' min jgħid ukoll li barra t-tfassil ta' żewġ kwestjonarji, l-għalliem-riċerkatur intervista amministraturi ta' l-iskola rtirati, u ġabar informazzjoni ta' natura storika minn arkivji differenti.

Mad-diskussjoni dwar kontenut, kull strument ta' stħarriġ iġib miegħu mistoqsijiet ta' natura etika u teknika. L-għalliema-riċerkaturi jridu jiżguraw li d-drittijiet ta' min ikunu qegħdin jirriċerkaw ikunu rrispettati f'kull fażi tar-riċerka.

L-imsieħba kollha li kienu se jipparteċipaw fl-istħarriġ ta' l-għalliem-riċerkatur ngħataw rendikont iddettaljat ta' l-għanijiet ta' l-istħarriġ. Permezz ta' ittra serraħnielhom moħħhom li t-tweġibiet tagħhom kienu se jibqgħu anonimi, filwaqt li tajnihom l-opportunità li ma jipparteċipawx jew jirtiraw it-tweġibiet tagħhom x'ħin iridu.

Mil-lat tekniku, kien hemm ħafna x'wieħed jikkunsidra. L-għalliema-riċerkaturi jridu joqogħdu attenti li filwaqt li jiġbru kemm jistgħu informazzjoni, ma jdejqux lil min ikun qiegħed iwieġeb b'tul esaġerat. Ma' dan l-għarfien, l-għalliem-riċerkatur u jien żidna mistoqsijiet bħal: Min se jwieġeb għandu l-informazzjoni neċessarja biex iwieġeb? Il-mistoqsijiet huma neċessarji u rilevanti fid-dawl ta' l-għanijiet tar-riċerka? Il-mistoqsijiet huma miktubin b'Malti/Ingliż tajjeb u sempliċi? L-ispazju mħolli għat-tweġiba jikkorrespondi mad-dettalji mitluba mill-mistoqsija? Il-mistoqsija hija ġenwina jew tqarreb lil min iwieġeb biex jirrispondi skond l-aġenda tar-riċerkatur? Il-kwestjonarju huwa mibni b'mod li jitlob konsistenza minn min se jwieġbu? L-ordni tal-mistoqsijiet hija tajba?

Il-kontenut tal-mistoqsijiet għandu jikkorrespondi ma' l-għanijiet, il-mistoqsija ċentrali u l-mistoqsijiet sekondarji tar-riċerka. Permezz tal-kwestjonarju li tqassam lill-ġenituri l-għalliem-riċerkatur stħarreġ: il-fiżjonomija vera tal-ġenituri; il-livell ta' kuntentizza rigward l-iskola ta' wliedhom; il-kwalità u l-kwantità ta' għajnuna li jagħtu lil uliedhom; fejn qiegħed id-djalogu bejn dar u skola; kif jista' jitjieb id-djalogu; u l-ideat tal-ġenituri dwar l-isfidi li jġib magħha parteċipazzjoni vera tal-ġenituri.

> " **L-għalliema-riċerkaturi jridu jiżguraw li d-drittijiet ta' min ikunu qegħdin jirriċerkaw ikunu rrispettati f'kull fażi tar-riċerka** "

Il-kwestjonarju li l-għalliem-riċerkatur qassam lill-għalliema stħarreġ il-livell ta' għarfien rigward il-kunċett tal-parteċipazzjoni tal-ġenituri fil-qasam edukattiv u l-livell ta' tolleranza ta' l-għalliema għall-parteċipazzjoni akbar mill-ġenituri fid-diversi oqsma ta' l-operat ta' l-iskola.

Permezz ta' studju pilota l-għalliem-riċerkatur irnexxielu jsaffi l-kwestjonarji minn numru ta' difetti teknici.

4. Tagħrif

It-tagħrif miġbur permezz tal-kwestjonarju mibgħut lill-ġenituri jindika li:

● hemm numru ta' tfal li qegħdin jgħixu f'ambjent familjari li mhux tradizzjonali

● ħafna ommijiet m'għandhomx edukazzjoni sekondarja

● ħafna ommijiet ma jaħdmux barra mid-dar

● il-missierijiet jaħdmu f'firxa kbira ta' xogħol

● il-ġenituri huma interessati fl-edukazzjoni ta' wliedhom

● il-ġenituri huma interessati f'dak kollu li qiegħed jiġri fl-iskola

● il-ġenituri sikwit jistaqsu lil uliedhom dwar x'inhu jiġri fl-iskola

● il-ġenituri m'humiex kuntenti bil-livell ta' komunikazzjoni li għandhom ma' l-iskola

● ħafna drabi l-ġenituri jattendu l-iskola f'ċirkustanzi negattivi

● il-maġġoranza tal-ġenituri tixtieq li l-ġranet għall-ġenituri jiżdiedu

● ħafna ġenituri ma jafux min huma l-għalliema ta' wliedhom

● kwart tal-ġenituri ħassew li hemm ħajt kulturali li qiegħed jifridhom mill-għalliema

● ħafna ġenituri ma jifhmux il-lingwaġġ użat fi ċrieki edukattivi

● ħafna ġenituri jaqblu li l-kunsill ta' l-iskola mhux effettiv

L-informazzjoni miġbura permezz tal-kwestjonarju ċċirkulat qalb l-għalliema ta' l-iskola tindika li:

● il-maġġoranza ta' l-għalliema fl-iskola taqbel mal-kunċett tal-parteċipazzjoni tal-ġenituri fil-proċess edukattiv

● aktar minn nofs l-għalliema qraw xi letteratura dwar is-suġġett

● ftit huma l-għalliema li qatt attendew xi seminars jew korsijiet dwar is-suġġett

● kważi nofs l-għalliema kellhom xi esperjenza negattiva mal-ġenituri

● ħafna mill-għalliema rrappurtaw li raw inċident bejn għalliema/amministraturi u ġenituri

● l-għalliema kollha qablu li l-ġenituri huma interessati fl-edukazzjoni u l-iżvilupp ta' wliedhom

● ħafna mill-għalliema jemmnu li l-parteċipazzjoni tal-ġenituri m'għandhiex tkun limitata għall-ġbir ta' flus

● ħafna mill-għalliema: ma jħossuhomx ippreparati għal aktar parteċipazzjoni tal-ġenituri fl-iskola; ma jaqblux mal-preżenza tal-ġenituri fil-klassijiet; iħossu li l-preżenza tal-ġenituri tista' twassal għal skumdità; ma jħossux li l-kunsill ta' l-iskola huwa effettiv biżżejjed; u ma jaqblux li l-ġenituri għandhom ikollhom id-dritt li jiċċensuraw deċiżjonijiet meħuda minnhom rigward il-kurrikulu.

5. Azzjoni

It-tagħrif miġbur mill-għalliem-riċerkatur jagħti stampa ċara u konkreta ta' fejn qegħdin il-problemi fil-qasam tal-parteċipazzjoni tal-ġenituri fl-iskola. Mir-riċerka li għamilt dwar dak li qiegħed jiġri f'din l-iskola kkonfermajt li x-xogħol li sar mill-għalliem-riċerkatur issarraf f'diskussjonijiet infurmati dwar il-bżonn li titjieb il-komunikazzjoni bejn l-iskola u l-ġenituri.

Dawn id-diskussjonijiet żviluppaw f'aktar riċerka interna dwar il-livell ta' sodisfazzjon tal-ġenituri rigward it-tagħlim, l-iżvilupp tal-kurrikulu, l-assessjar, l-*ethos*, it-tmexxija u l-komunikazzjoni, ir-riżorsi u l-attivitajiet edukattivi barra mill-iskola. It-titjib tar-relazzjonijiet bejn l-għalliema u l-ġenituri jifforma parti mill-għanijiet u l-miri tal-pjan ta' żvilupp ta' l-iskola. Il-kunsill ta' l-iskola huwa ħafna aktar attiv u qiegħed jingħata spazju biżżejjed biex jieħu deċiżjonijiet fil-parametri tal-liġi li tirregola l-kunsilli ta' l-iskejjel.

L-amministrazzjoni, megħjuna minn grupp ta' għalliema, qiegħda toffri ħinha lill-ġenituri wara s-2.30. L-iskola se twieġeb ukoll għat-talba tal-ġenituri biex jiġu aġġornati kontinwament bil-progress ta' wliedhom. Fl-aħħar, l-analiżi u d-diskussjoni wasslu biex jikber il-kuntatt bejn il-ġenituri u l-*form teachers* permezz ta' laqgħat regolari bejniethom.

Ringrazzjament

L-għalliem-riċerkatur aċċetta li jżomm ismu mistur.

Filwaqt li nirringrazzjah, nixtieq nifraħ lill-iskola għall-impenn tagħha favur il-parteċipazzjoni tal-ġenituri.

Producing a critical newspaper

Ivan Said

While reading the January/February 1999 edition of the *Columbia Journalism Review* I met with a stimulating article which inspired me to write this contribution. The experience, with many deep educational - and pedagogical - implications, could be easily emulated by any Maltese school - or journalist - of any social standing. Thus I thought worth sharing this experience with the readers of the *Education 2000* journal and add some of my thoughts on the matter and give some suggestions. The compelling story started four years ago when Leslie Seifert, an opinion editor for Newsday and an adjunct professor at Columbia's Graduate School of Journalism, approached the 500-student Middle College High in New York City, a school for children in danger of becoming dropouts, and proposed starting a school newspaper, free from censorship by the principal and staff.

> **❝My idea was to publish a school newspaper that students would write ... and the principal and teachers would see only after it hit the hallway❞**

IVAN SAID (b. May 3, 1966) is a programming officer for Radju ta' l-Università. He has a BA (Communications Studies and Maltese) and an MA Qualifying. He was features editor of The Times and trained in journalism in Berlin and Malta. He underwent a Med-Media educational radio course in November 1992. He also works as a free-lance journalist for major newspapers in Malta and Radio France Internationale.

"My idea was to publish a school newspaper that students would write, that I would edit, that the school would fund, and the principal and teachers would see only after it hit the hallways", Seifert writes in the Columbia Journalism Review. "The newspaper's relationship to the principal and faculty would mirror that of an independent daily to the local mayor and his administration. There would be no censorship. Anyone who found an article inappropriate was welcome to respond in writing or stage protests. No one was required to grant interviews or supply information," Seifert adds in his contribution to the CJR.

"Honest, uncensored journalism," Seifert quotes himself as saying to the school staff, "might bring kids to school, make them feel involved, connect them to writing, give them a voice."

Now let us focus on the four loose targets of Seifert's 'honest, uncensored journalism'. But before we proceed I ought to say that there is an important prerequisite - the person responsible for the project must be a good leader. He should fit Paulo Freire's description of "revolutionary educator" which we find in his "Pedagogy of the Oppressed": "(His or Her) Efforts must coincide with those of the students to engage in critical thinking and the quest for mutual humanization. His efforts must be imbued with profound trust in people and their creative power. To achieve this, they must be partners of the students in their relations with them."

Ideally the person/s taking up this challenge should be an independent minded journalist. He or she must have the basic principle of the profession embedded in his soul, i.e. of selling fair and unbiased information to readers. Such principle should be thoroughly explained to prospective students joining the newspaper and they should be asked to commit themselves to some sort of a code of ethics. Journalism is a profession and has its own ethics and no one who enters the profession - not even school journalists - should abdicate from their ethical and legal obligations.

● **Might bring kids to school.** This may attract social dropouts. It might make them aware of the advantages and disadvantages and of the merits and the demerits of the school they attend. "So school is not just books!" they might argue. "After all we have a say at school," they might admit and see the benefits of attending classes.

● **Make them feel involved .** The setting up of such a newspaper helps students to build a community spirit. The exercise can present them with alternative models of communication and representation as it is widely believed that the mass media offer audiences not a window of the world, but a filter that selectively builds a new reality. This is an opportunity for them to see authentic media representations of their own communities that speak to their concerns.

● **Connect them to writing.** The sky is the limit for the students' imagination. Moreover, the environment may stimulate them. Motivation is the key to writing and an uncensored newspaper should motivate them infinitely.

● **Give them a voice.** Having the liberty to speak and your ideas realised is the basis of democracy. It is useless that you speak with no chance of having listeners or your ideas being implemented.

The newspaper must be a means of dialogue not just for the school community but also for the project players. "Dialogue" writes Freire in his 'Pedagogy of the Oppressed', "further requires an intense faith in humankind, faith in their power to make and remake, to create and re-create, faith in their vocation to be more fully human (which is not the privilege of an elite, but the birthright of all). Faith in people is an a priori requirement for dialogue; the 'dialogical man' believes in others even before he meets them face to face. His faith, however, is not naïve. The 'dialogical man' is critical and knows that although it is within the power of humans to create and transform, in a concrete situation of alienation individuals may be impaired in the use of that power."

Before embarking on a project like this the project leader must:

● Explain to the school principal and staff the idea of having a school newspaper critical of, funded by but editorially independent of, the school. Editorial independence is of the utmost importance.
· State clearly the objectives of the project to school students.

● Explain to prospective "school journalists" the basic principles of journalism and the ethical and legal implications. (The Malta Press Club "Code of Ethics for Journalists" and the Press Act come handy here.)

● Write a one year business/development plan.

● Plan and put up an editorial setup defining clearly each role and task. According to Seifert, up to the January/February 1999 issue of the CJR, his school newspaper remained uncensored and articles led to concrete changes. The journalist gives the following list: "the redesign of a disagreeable cafeteria space, repairs to ceilings and walls, the revival of a moribund boys' basketball team and several clubs, and promises of a cheerleading squad."

He also writes: "The newspaper reported on a graffiti problem inside a diner next door and the vandalism stopped. School dances, which frequently were canceled because of insufficient tickets sales and poor planning, now usually succeed, the organizers having been shamed by reports on their past failures."

Perhaps I am dreaming but I am raring to see such an engaging activity in one of our schools.
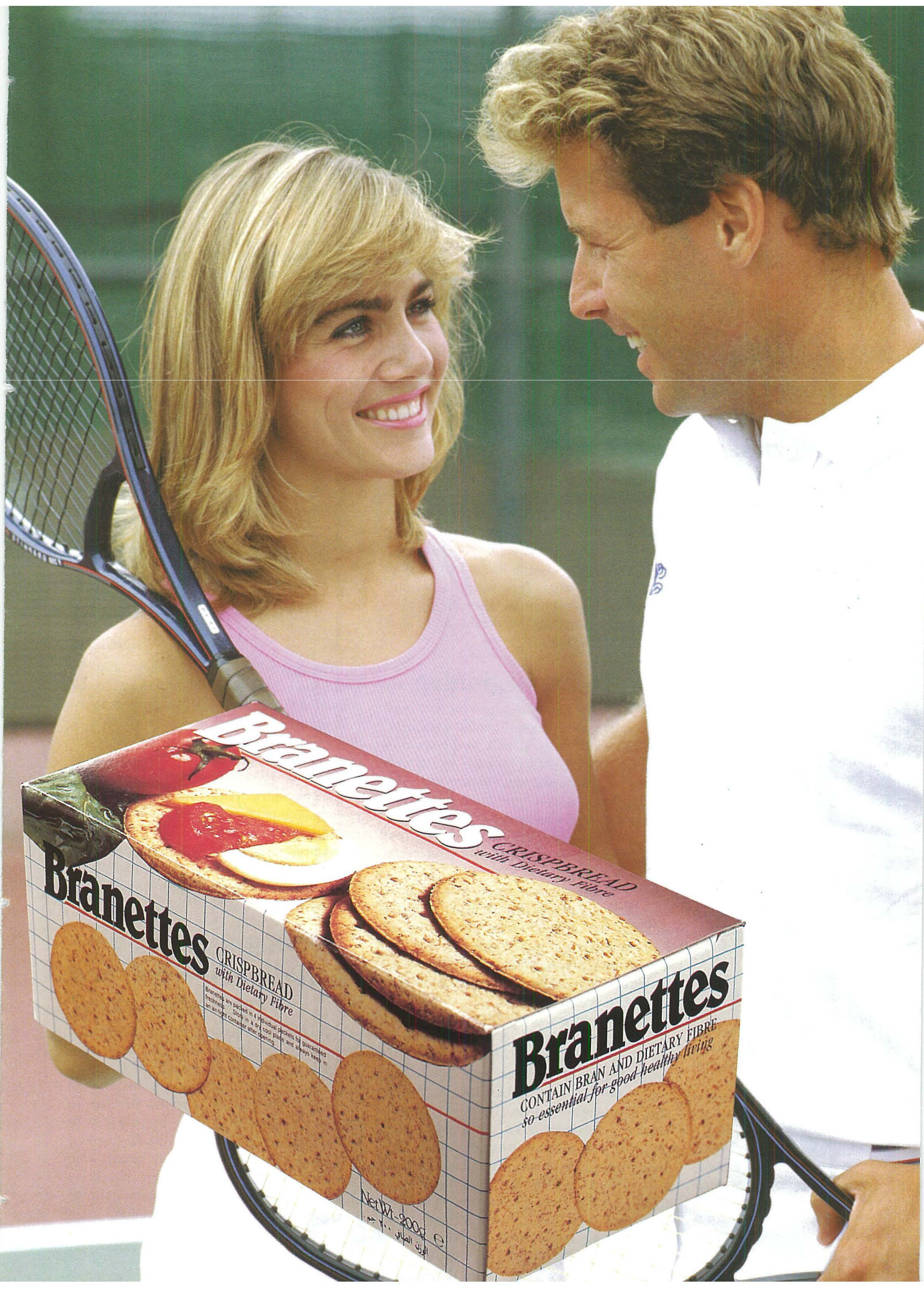
First steps in parental involvement in primary education

Geraldine Taylor

> **The benefits of parental involvement in primary education are well known and documented in terms of both skills and attitudes**

GERALDINE TAYLOR is Educational Consultant to Ladybird Books Ltd. She holds a BA and an MA from Bristol University and a Diploma in Special Education from the University of the West of England. She has led workshops on children's learning for thousands of parents in the UK and has lectured on parental involvement at the Bristol University Department of Education.

In the UK, the benefits of parental involvement in primary education are well known and documented in terms of both skills and attitudes. Moreover, parental involvement in learning is encouraged in the home-school agreements now issued by each school. This encouragement to participate was not always the case. I have been called one of the mothers of parental involvement because I have been associated with this movement since 1984 when the idea of parents as partners was virtually unheard of. Since that time, I have worked with thousands of parents and dozens of heads of primary schools, nurseries and with pre-school groups, working out practical first steps, seeing those steps through, evaluating what is going on and planning for the future. In this first article, I would like to look in detail at taking those first steps within a primary school setting. These are the steps which invariably feel the most vulnerable to those of us in the profession.

In the beginning ...

● Perhaps the most productive and democratic way to begin is to hold a teachers' meeting, specifically to look at the issue of involvement and to hear how each teacher feels about it. It's very important to hear and value these feelings, even if reservation and anxiety are expressed. No-one should feel forced into parental involvement, and knowing that anxieties can be raised safely is often a powerful way to dispel them.

● Discuss or brainstorm what you hope to gain from parental involvement. This can valuably be a mixture of the general: to get across a welcome to parents, the more specific: to get parents to help with reading at home and the particular: to make sure children know their alphabet names and sounds.

● Would you prefer the parents to help you in the school itself - or would you prefer the help to be at home - or both?

● Establishing parental involvement takes time. Do not feel rushed into arranging meetings and workshops. If you would prefer parents' involvement to be outside school, then there are very valuable ways to achieve this. In any case, it's wise to take time to lay the ground by special letters and newsletters. I have found that this is one of the most productive ways to develop links - and can often have a more lasting and widespread effect than a sudden invitation to come to a meeting, or to help out in the classroom. Parents are more likely to respond to an invitation to a meeting if they understand what you are trying to do.

● Is there one member of staff who would like to be responsible for home-school links or should there be a small committee of say three or four. How will they keep everyone informed? How will they elicit ideas? Would further planning meetings be helpful?

I would like to look next at some of the reactions which inhibit parental involvement. I find that these perfectly understandable reactions are still widespread in the profession.

If we hold a meeting, we will only get the parents we always see...

This may be true at the beginning but surely many good causes begin by preaching to the converted? These same parents may be the very parents who could valuably learn from a discussion of the effects of pressure on children's learning. Moreover, you could enlist their help to spread the word.

If you show yourself open to parent participation in children's learning, then little by little, parents will come. I have held school-based meetings with as few as two and as many as 204! Value the parents you always see. These are your anchor people and your beginning.

What happens if we arrange a meeting and nobody comes?

If only one or two people come to what you have arranged, carry on anyway but in a very informal way, and ask these parents how they think you can best work together to encourage children's learning. What would they like to know - what kind of information would be most helpful for them. Try not to evaluate your first steps in terms of the number of people who respond by attending a meeting. If nobody comes, use the free time to discuss and plan your next approach. The important thing is that you have taken the first step.

If we ask parents to get involved, they will encourage their children

This could be an excellent opportunity to explain what pressure is and show children how best to avoid it! About this see: "The Motivated Child" in *Education 2000 No 4: 1998.*

Some of our parents are not literate themselves

All parents can learn the skill of effective encouragement. They can learn other skills, too. For example, the most valuable way to talk about pictures in books is to encourage early reading as a skill and one the profession could share with parents. In the long term, too, what you arrange as parental involvement could have a positive impact on these parents' literacy itself.

That would not work here...

Sometimes circumstances may seem to be against parental involvement but that does not mean it is not worth trying - and it is certainly worth sharing experiences and pooling expertise with other schools.

Faculty of Education Research Seminars

It is often the case that we who labour in the field of education are very much perceived to be action people with limited opportunities for reflection. There are so many practical considerations to be seen to that oftentimes when we meet, it is to disuss policy and to decide on possible ways of action. It is as if we cannot afford the luxury to stop and reflect on the thinking which guides our practice. With this in mind and to provide an opportunity for local educational researchers to share their work with the educational community, the Faculty of Education has embarked on a series of research seminars.

The first research seminar which was a huge success was held on Wednesday, 10 November. It was very well-attended by colleagues from the Faculty, Education Division officials, post-graduate students, school-based colleagues and others from different spheres of life, like industry, etc.

On Wednesday 10 November, Dr Grace Grima, who lectures at the Faculty of Education, gave a presentation on: Group Assessment in Education: An International Perspective, based on her recent doctoral work in New Zealand. Her multi-media presentation was followed by a discussion on: The Role of Group Assessment in the Maltese Curriculum. Some very important points were made by Ms Mary Vella, director for Curriculum of the Education Division who has chaired the Committee which drafted the new National Minimum Curriculum for Maltese schools.

Dr Grace Grima has recently returned from New Zealand, having completed her doctoral studies at the University of Otago as a Commonwealth scholar. Her placement at the Educational Assessment Research Unit of the University of Otago allowed her to conduct a probe study within the National Educational Monitoring Project, a project with a four year cycle, contracted by the Ministry of Education, to monitor children at different stages of their formal education. Her specialisation in group assessment has presented her with opportunities to publish her ideas as wellas to present her work at several educational conferences in New Zealand, North America and Australia.

The second Faculty of Education Research Seminar will be held onWednesday, 12th January, 2000 from 6.00 - 8.00 pm in the Faculty of Education Board Room, Old Humanities Building, Room 326.The speaker will be Dr Paul A. Bartolo of the Department of Psychology of the Faculty of Education. His presentation will deal with decision-making frameworks in the assessment of the educational needs of children with developmental disability.

Educators, other professionals and parents are constantly faced with making decisions about the best ways of meeting the developmental and learning needs of the children they serve. How do they make their judgements and decisions? What influences their decision making?

As Dr Bartolo's presentation will show these questions were explored through a qualitative analysis of multiprofessional discussions among psychologists, a psychotherapist, a paediatrician, speech therapists, teachers and heads of school and parents in two agencies in London: one based in a hospital and one in a school.

Dr Paul Bartolo is an educational psychologist and full-time lecturer in the Department of Psychology of the Faculty of Education. He is co-ordinator of the educational psychology stream of the M.Psy professional training course for psychologists recently offered by the University of Malta. He has conducted wide-ranging teaching and professional work as a school psychologist in state schools and with the EDEN Foundation. He holds a PGCE and MA from the University of Malta, an M.Ed in Educational Psychology from Toronto, and an M.Sc in psychology professional training from Manchester. He has recently completed his Ph.D at the University of London.

For further information about Faculty of Education Research seminars please contact Dr Charles Mifsud on 3290 2039 or cmif2@educ.um.edu.mt.

Valid Environmental Education: an issue of perceptions

Paul Pace

Introduction

Environmental education is "*... the educational process through which is imparted to its target groups the sensitivity, awareness, knowledge, skills, attitudes, commitment for actions and ethical responsibilities for the rational use of the environment and its resources and for the protection and improvement of the environment for the present and future generations*", (Schembri *et al.*, 1989, p.29). Implementing environmental education in the Maltese educational system does not simply imply the inclusion of environmental topics in syllabi, but a radical rethinking of the way the whole curriculum is structured, implemented and evaluated. This explains why sound local environmental education curriculum initiatives have characteristically experienced implementation problems (Pace, 1997a).

> 66 **The environment is made up of three major components: the natural environment, the built environment and the social environment** 99

PAUL PACE B.Ed. (Hons), M.Ed., Ph.D. (Brad) is Head of the Department of Maths, Science & Technical Education, Faculty of Education, University of Malta. He lectures in science education and environmental education. He is chairperson of the coordinating committe for the national strategy for environmental education.

This paper summarises the results of a study whose main aims were to establish whether the Maltese formal educational system and the main educational policy makers are receptive to the principles of environmental education (as defined by the Tbilisi conference - UNESCO-UNEP, 1978), and whether teachers are ready to assume the role of change agents within the formal educational system. The study was carried out on a sample comprising student teachers, practising teachers, education authorities from the Education Division and university lecturers involved in the teacher education programme. The results presented in this paper highlight the sample's basic perceptions about the environment and environmental education.

Underlying perceptions about the environment

Our perception of the environment invariably determines what we consider as being appropriate environmental education. The results obtained show that the sample perceives the environment as being made up of three major components: the natural environment, the built environment and the social environment, and that an environmental education programme should address all of these three components. However, on closer examination an underlying naturalistic interpretation (Lahiry *et al.*, 1988) of the environment was revealed. A large percentage of the sample, particularly teachers and education authorities, considered the natural environment as the major component of the environment and the main concern of environmental education initiatives.
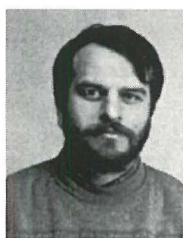
Although acknowledging the interdisciplinary nature of environmental education, the majority of the respondents still considered science as its basis, possibly reflecting a deep-rooted belief that science is the only repository of 'valid' knowledge. Respondents seemed unaware of the possibility of achieving understanding about environmental issues from "feelings and intuitions" as much as from scientific knowledge (Clover, 1996). In fact, this present study found no statistically significant difference, vis-à-vis environmental education, between science and non-science student teachers. Science is not only seen as the main tool for an 'objective' understanding of environmental phenomena, but also as the main instrument enabling humans to interact with them. This approach puts humans at the centre of environmental discourse and defines the environment on the basis of human interactions, which has been characteristically exploitative. Consequently, when the sample was asked to describe the term 'environment' quite a large proportion cited different forms of 'environmental problems'. Resolution of these problems is usually sought in science and technology. This positivist anthropocentric view was observed in the majority of the sample, who believed that science and technology offer easy solutions for environmental problems, even though they acknowledged that these problems are difficult to resolve because of the cultural and social factors inherent in them.

Nevertheless, further evidence from this study and research on the development of environmental education in Malta (Pace, 1997 b) indicate that attitudes toward the environment, and therefore toward environmental education, are evolving. A common trend, weaving throughout the responses of all sample categories, points at an emerging stance supporting an interdisciplinary approach in the resolution of environmental problems and in the design of environmental education curricula.

Awareness of environmental issues

The level of awareness about environmental issues is one of the indicators of a population's level of environmental concern. This present study confirmed other research results regarding the identification of local environmental problems (Axiak, 1987;

> **Air pollution, land misuse and loss of biodiversity were the three most cited environmental problems of the Maltese Islands**

Planning Services Division, 1990; Kerr, 1992; Pace & Ventura, 1996). Air pollution (predominantly caused by heavy traffic), land misuse (characterised by the encroachment of buildings over 'green areas') and loss of biodiversity (comprising the hunting issue) were the three most cited environmental problems of the Maltese Islands. Also quite high was the score for land pollution (with special reference to the large quantities of waste generated). The research results also confirmed observations made by various authors (e.g. Chiang & Din, 1993; Espeut, 1993; Lahiry *et al.*, 1988) that pollution, in all its different forms – particularly air pollution, is the most commonly cited global environmental problem. While stressing that learners should be helped to develop a global perspective of environmental issues, respondents gave clear indications that they were aware of the international dimension of environmental problems both in the way they are caused and also in the way they can be resolved.

Nevertheless, the mention of sociocultural issues was conspicuously lacking from the list of local and foreign environmental problems cited by the respondents. For example, it is very surprising that overpopulation, a very topical issue in a country with the highest population density in Europe, was marginally considered by the study sample, as well as in the other local studies cited. While results might be showing a concern about issues that directly affect the respondents' health (e.g. air pollution), the aesthetics of their surroundings (e.g. unchecked spread of buildings, accumulating rubbish heaps) and their leisure (e.g. hunting), they also disclose a lack of awareness of the root causes of these environmental issues (e.g. a high population density). Concern about the symptoms and failure to identify and hence address the root causes are an indication of a lack of problem solving skills resulting in an

> *... the predominant feeling was that the individual is helpless when faced with global environmental problems*

inability to take appropriate actions in the right direction (Benedict, 1991). In his comparative study on values, Abela (1993) cites evidence confirming that Maltese fail to make a connection between cause and effect and claims that the problem could be deeper.

Abela (1993) maintains that the level of environmental awareness in the Maltese is very superficial and lacks internalisation. Attitudes and values are not adequately developed and pro-environmental action is rather lacking. His study seems to suggest that the Maltese have a tendency of considering problems of a social, economic and cultural nature as stemming from within the individual rather than being a response to external environmental factors. This might explain the results consistently obtained in studies on environmental problems in which issues not directly linked with the natural environment are trivially considered.

Environmental education as the basis of environmental responsibility

The vast majority of respondents acknowledged the environmental responsibility that humans share, but the predominant feeling was that the individual is helpless when faced with global environmental problems. The power of individual action was practically underestimated by all of the sample categories, except for university lecturers. The value of individual action was only acknowledged if it was backed up by numbers or by official policies. A possible explanation for this phenomenon could be the positivist perspective detected in the study sample. Influenced by the belief that science and technology have the power to resolve environmental issues, citizens tend to pass on their environmental responsibility to the 'experts' whose "*decisions count*" or who "*know what they're talking about*". Respondents entrusted environmental NGOs with the responsibility of safeguarding the environment and expected them to interfere in development plans involving environmental degradation. However, there seems to be a recurring doubt about whether sustainable development is really possible. This liberal technocratic outlook, also emanating from a positivist ideology (Pepper, 1984), was evidenced by the sample's relative uncertainty about whether "*environmental degradation is an inevitable consequence of development*" or not.

If membership in an organisation can be considered an indication of a person's degree of participation within the community (Gray *et al.*, 1985), the low affiliation of the respondents to organisations, particularly in the case of student teachers, is a cause for concern. The trend seems to confirm the individualistic

> **The goal of environmental education is essentially the development of an environmental ethic that would prompt the learner to take concrete actions to improve the quality of the environment by adopting a sustainable lifestyle**

attitudes observed by Abela (1993), particularly in the younger generation, which are in direct contrast with the values characterising an environmentally responsible person (Gray *et al.*, 1985). Respondents belonging to an organisation tended to have a more positive attitude toward environmental education than non members do. Furthermore, members of environmental NGOs tended to view environmental education as the basis of a strategy promoting environmental responsibility.

The study also identified individuals who fall within the 21-50 age group as well as B.Ed. 4th year and PGCE students as the most receptive audience to an environmental education strategy promoting environmental responsibility. With reference to how such a strategy could be implemented, results showed that exposure to environmental education courses had significantly made a difference in the respondents' attitude towards the importance of environmental education. The data gathered also revealed a tendency of professional training courses to include environmental education as well as a relatively high percentage of individuals who felt the need to follow an environmental education course for their personal development.

Conclusion

The goal of environmental education is essentially the development of an environmental ethic that would prompt the learner to take concrete actions to improve the quality of the environment by adopting a sustainable lifestyle. Over the years we have seen several interpretations of the term 'environmental education' that have not always reflected its true nature. Its successful implementation requires a rethinking of the way we perceive the environment, our interaction with it and what we mean by education. In my next paper I will be dealing with the second part of the study, i.e., issues concerning the implementation of environmental education in the formal education sector.

A more extensive discussion of the results summarised in this paper was presented at the 23rd Annual Conference of ATEE (Association for Teacher Education in Europe) held at Limerick, Ireland (24 – 30 August 1998). While thanking all those who have participated in the study, with this paper I would like to fulfill my promise of distributing a summary of the results – a promise that was delayed due to the theft of my laptop … and all my research data! - The author
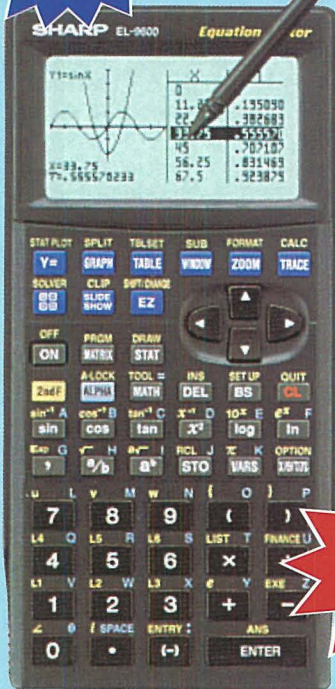
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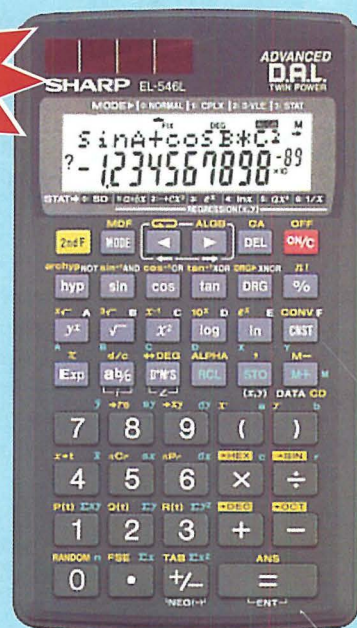
Maltese Fonts and *Kid Pix*

Norman C. Borg

Year 1 and 2 teachers supplied with the older version of *Kid Pix Studio* are well aware of a number of restrictions in the program one of which is that the use of Maltese Fonts is practically impossible, whether these are installed on the hard disk or not. The problem is that *Kid Pix Studio* has its own, very limited, number of *graphical* fonts which, once pasted onto the screen, become part and parcel of the picture. Apart from this small number of fonts, there is no way for *Kid Pix Studio* to access and recognise the normal TrueType Fonts installed in *Windows*, and available for practically all the Windows-based applications such as *Word* and *Print Shop Ensemble III*.

> ❝ **Whenever you need to use Maltese text for a *Kid Pix* on-screen activity, you can simply create a graphics-only bitmap in *Kid Pix*** ❞

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I have observed that most teachers have gone around this problem by actually adding hashes and dots to the Maltese letters, using the Pencil or Straight Line tools. Although this may be a practical makeshift solution, the results are not always accurate and visually pleasing. When considering that we are here speaking about activities for children who are still becoming acquainted to letters, the results may tend to be misleading at times and perhaps even counter productive.

There is in fact a better solution to the problem once you understand the inner workings of both *Kid Pix* and the *Windows* operating environment, even if this may take a little bit longer to produce the desired effect. The result, however, will be excellent. To explain what is actually going on I will have to be a little technical, so bear with me for the next few paragraphs.

Kid Pix Studio saves its Paint-a-Picture files in the .bmp format. This actually stands for BitMaP, and practically means that the picture is saved as a grid of dots, or squares. If you were to zoom in on the picture, you would just see an array of blocks, all in different colours, which together make up the picture just like a mosaic. There are other graphic formats which do away with the *blockish* effect and actually render pictures more accurately; but these are not supported by *Kid Pix Studio*. These formats are *vector-based*, and rather than rendering the picture as a sequence of dots or squares, they actually use mathematical formulae to work out the lines and curves of the picture. When the picture is zoomed in or out, the curves are mathematically reworked on the fly, and so the picture will always appear smooth.

The problem is that TrueType Fonts, the standard font type used for the majority of *Windows* applications, are actually vector-based graphics. This is why they always render perfect images when printed, whatever the size. So *Kid Pix Studio*, which is a bitmap-

Fig1: This is the graphic side of the file: it was created in Kid Pix Studio using the Stamp and Rectangle Tools as normal, and then saved.

based application, is not able to read these fonts. Instead, it has its own bitmap versions of some of them, limited to only one particular size. If these are used with the Zooming Tool, the results may sometimes be unreadable.

The problem is partially solved in *Kid Pix Deluxe*, currently available in the Year 3 and 4 classes. *Kid Pix Deluxe* enables the user to access the TrueType Fonts available on the system, at whatever the size. What *Deluxe* does, however, is save the combined graphic and text elements of a picture *separately*. If you reload a picture with TrueType Fonts in *Kid Pix Deluxe*, there is no problem. But if you load a *Deluxe*-created picture into *Studio* or any other bitmap-reading software, you will find that any TrueType text originally typed into the *Deluxe* picture is lost. In short, suppose you wish to export some *Deluxe* pictures containing text

Continued overleaf

Daħħal il-kliem fil-kaxxi
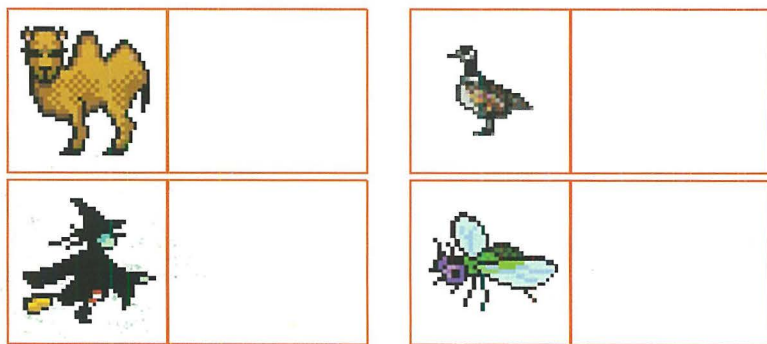
żunżana   **saħħara**   **għasfur**   **ġemel**

Fig2: The same file was then loaded into Paint and the text added in using one of the Maltese TrueType Fonts installed in the system.

Maltese Fonts and *Kid Pix*

into a *PowerPoint* slide show, you will find that any text created in *Deluxe* cannot be read by *PowerPoint*.

What we need, therefore, is something that can recognise TrueType Fonts (unlike *Studio*) but which can then integrate the fonts with the rest of the picture as part of the bitmap (unlike *Deluxe*). The very simple answer for this is *Microsoft Paint*.

Paint is a very rudimentary bitmap graphics program which is available from the *Windows* Accessories menu. So it is free, and you already have it in your *Windows* system. Albeit lacking in terms of graphic effects and features, it does give you the opportunity to access any installed TrueType Fonts. Simply click on the Text Button, click somewhere on the screen, and type away.

While you are still typing you can backtrack and delete as necessary.

The text area expands accordingly. But once you click away from the text, there is no way of editing it short of covering it up and typing all over again. This is because as soon as you click away from the text, *Paint* transforms it into part of the bitmap picture. You may not be able to edit the text later, but once you save the bitmap, the text is not lost if you load it into another application.

So, whenever you need to use Maltese text for a *Kid Pix* on-screen activity, you can simply create a graphics-only bitmap in *Kid Pix*. You can then load the picture into *Paint*, select a Maltese TrueType Font and size, and insert the text where necessary.

When you load the re-saved bitmap into *Kid Pix*, this will include the TrueType text.

Motivation begins from within

Christopher Bezzina

This article is aimed at all Heads of School who are doing their utmost to create a warm and conducive culture which helps the school move forward in times of constant change. It is written as part of the initiatives being undertaken by *The Malta Society for Educational Administration and Management* to disseminate work in the area of educational management and leadership. The *Education 2000* Editorial Board is happy to support such an initiative at a time when the concepts of management and leadership need to be clearly understood and lived.

We all enjoy the company of cheerful, enthusiastic and growth-oriented individuals. We gravitate to them and try to emulate them. Such people often share six characteristics which leaders require if they want to be motivators of people rather than demotivators. These characteristics are: knowing yourself, liking yourself, taking control, flexibility, accepting reality, and living fully. Let us examine each of these leadership characteristics.

1 Know yourself

Knowing yourself implies knowing your values, the values you uphold, the values you project, the values you live. It means being able to answer the perennial question, "Who am I, and what aspects of life mean most to me at this point in life?" Only after answering this question can individuals order their priorities and live by their values. When that happens they gain self-respect and feel good about themselves and what they do.

Heads of School who know themselves recognise not only their strengths but also their weaknesses. Knowing their abilities and deficiencies allows them to be comfortable in delegating responsibilities to those who are more capable in identified areas.

Knowing yourself also means building enough self-confidence to believe in oneself, in what you are worth and what you can give.

2 Like yourself

We often tend to ignore this characteristic as we engage ourselves in addressing organisational needs. People who like themselves focus on their strengths rather than their weaknesses. They think positively. They set high standards for themselves. They set achievable goals and celebrate their success. Such people express their satisfaction openly. They assert themselves, openly expressing their thoughts and taking control of their decisions rather than letting others control them.

Leaders who possess this quality can establish a positive climate in their schools by empowering others, by valuing diversity, by focusing on individual and collective strengths, by setting high standards, by rewarding improvement, by celebrating success and establishing a set of values that everyone identifies with and lives.

3 Taking control

Self-confident people take charge, make decisions, and take responsibility for the consequences. I know of many a Head who, even in the highly centralised system we had in the past, were willing to risk and take the road not taken by others, since they were convinced that was the best thing to do. They are the ones who do not blame themselves or others when things go wrong. That is often the easy way out. These Heads are doers and therefore do their best to focus on the problem so as to solve it. Taking control here is not of the coercive type. Rather they try to exert their influence by clearly delineating rules, expectations, and consequences. By empowering others, they send out clear messages (to those who want to hear!) that they believe in others and want to create opportunities for them to take the initiative necessary to bring about improvement.

4 Being flexible

Flexibility is a key ingredient in any job or facet of life. The flexible person knows and appreciates that every issue/ problem has several solutions. They understand the need to

Realistic Heads also acknowledge that the teaching community in the schools themselves has changed and that education now involves a more complex set of issues and relationships than we have ever addressed or experienced.

Realistic Heads communicate honestly and truthfully with their staff, encouraging them to face reality and providing them with support in confronting difficult issues of a personal and professional nature.
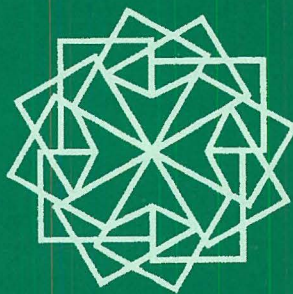
6 Living fully

The best educators live fully. They do not live and die for education. They write, read, travel, visit museums, go to the theatre, do voluntary work, enjoy a social and athletic life. They have varied interests and lead exciting lives. As I write this I am pinching myself as I appreciate how difficult at times this is for us who are immersed in the field of education, how difficult it is to stop and spend time with family and friends. Our work is so challenging that we often give it top priority over everyone and everything else. This should not be.

It is important for Heads to enrich their school environment with their out-of-school experiences and to encourage staff members to do the same. If, and where educators bring their own backgrounds, interests, etc. to the school, quality education often results. Education is more than books and teaching in the classroom. Education is life, life is education.

Needless to say leaders cannot model qualities they do not possess. They must motivate themselves to become upbeat and growth-oriented individuals if they expect to find or nurture those traits in others. But, those Heads who succeed in developing the motivational characteristics described here will be rewarded with school climates where not only they but their staff know themselves, like themselves, exercise control, are flexible, accept reality and live life to the full.

be willing to listen to alternative views, to modify their behaviour, to change their perceptions, to try out different alternatives. Your way cannot be the only way forward. Such a perspective and style of management can only spell disaster.

The flexible person acknowledges changes in oneself as a sign of growth. Such a perspective does not only pay lip service to the concept of lifelong learning we are so used to hearing about, it helps to create a lifelong need to learn. Such people are willing to immerse themselves into new situations, in working with others to challenge the status quo. They are individuals who revel in new insights.

Flexible, growth-oriented Heads model growth for their members of staff and create a climate that encourages one and all to seek growth opportunities within and outside the school. Such Heads of School go out of their way to see that their staff have the necessary facilities, structures and opportunities required for personal and collective growth to take place. They are excited when staff bring forth new ideas, when they share their successes and failures, when they ask for help, when they provide constructive criticism. They are the ones who express this excitement throughout the school and all this helps to create a warm climate where everyone knows that they are important and can contribute to the welfare and development of their school.

5 Accept reality

These are indeed hard times, especially for us who grew up in a different era with the things that confront us being so different from the ones we were brought up in. Yet, those Heads that have accepted that reality is different take pride in their accomplishments. By accepting the fact that children have changed, being influenced as they are by so many social influences, good and not so good, they relate to them differently than those who expect the youngsters to act as they did ten or twenty years ago.

66 We all enjoy the company of cheerful, enthusiastic and growth-oriented individuals. We gravitate to them and try to emulate them 99

CHRISTOPHER BEZZINA, Ph.D (Brunel), lectures in educational management at the University of Malta. He is the author of a number of scholarly articles published in international journals. He has also written a number of books about this subject. He is the president of MSEAM.

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Let Me Learn

The Professional Development Institute

Salvina Muscat

In her first presentation at the second *Let Me Learn Professional Development Institute* held in Bridgeport New Jersey June 1999, Dr. Christine Johnston from Rowan University, stressed that *Let Me Learn* is student centred as it focuses on the pupil as a learner rather than on the teacher's teaching. Both pupil and teacher using the *Let Me Learn* process develop a greater sense of efficacy about their teaching and learning. (Johnston, 1998). All students will take what they have discovered about themselves anywhere they go. As a result of this, students communicate better among themselves as they acknowledge and accept differences. This also encourages underachievers to participate equally in classroom learning. Hence this process makes pupils feel empowered and builds their self-esteem.

The LET ME LEARN PROCESS is an opportunity for teachers and students to work together to allow each student to gain the most from his or her learning experiences. Ms. Salvina Muscat, Head of Fra Diego Bonanno Girls' School, Marsa, one of the three pilot schools engaged in the Let Me Learn process, reports on the Professional Development Institute organised by Rowan University, New Jersey and on the progress registered by her school.

Teachers who participated in this process were able to realise that the traditional step-by-step teacher-directed instruction could not reach all the students. Hence they made the effort to change their teaching approach in order to create a classroom environment which allowed all learners to feel encouraged and to participate in learning.

During scholastic year 1998/99 the *Let Me Learn Project* started in three Maltese state schools: Mosta Primary School A, Valletta Primary and Fra Diego Bonanno Girls' School, Marsa. Training was given to those members of staff who volunteered to participate in the project. The teachers who participated at Fra Diego Bonanno Girls' school were involved in the process of reflecting on the teaching strategies used in the classroom.

"*I changed in the way I look at and teach my students. I am less rigid in the sense that I give a couple of alternatives when it comes to doing a task. The students then choose the one method which they feel most comfortable with,*" is one of the comments of a member of my staff.

Many more responses were written by the staff in an evaluation sheet they returned in March after five months of training in the *Let Me Learn* process.

The *Let Me Learn* process helps teachers understand how important it is to teach through group work. Because of the differences that exist among students better learning can be achieved through team building activities. Thus this process also helps create in the classroom a community of learners where every member feels that s/he is contributing to the learning environment. Above all this process encourages reflection on the classroom practice. Teachers are encouraged to inquire about the learning activities and the performance of students. The dynamics of classroom discourse changes as the classroom climate changes. Teacher-learner partnerships are created as students can better discuss with teachers, thus taking more responsibility for their own learning. Following a Staff Development Day organised in December at Fra Diego Bonanno Girls' School, a group of teachers wrote:

"*We hope that by using the Let Me Learn, the students will be able to find their own methods of learning. In this way students will be more motivated as they will better understand what they are learning. The Let Me Learn makes students reflect and responsibility will shift from the teachers to the students, parents and the community.*"

In order to better understand the learner, the teacher needs to collect information and interpret it free from every bias (Johnston, 1998). This is done by preparing the students to take the Let Me Learn Inventory (LCI), which has been developed over 6 years of pilot studies in the US and other countries. The LCI is a set of questions which when translated has the ability to identify the student's learning patterns. Every brain functions by using four different patterns of learning, each with a distinct message. These patterns exist in all of

continued overleaf

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us to some degree and contribute to our unique learning combination. Once these learning patterns are identified, a dialogue starts between the learner and the teacher. This dialogue will contribute towards the development of the appropriate skills needed in order to facilitate the learning process.

On the afternoon of the first day there was an interesting presentation by the students participating in the **Let Me Learn** process. The way the students spoke was very encouraging. We were introduced to the idea of the Power Card. This is a card which helps students understand what they need to remember to do before starting an assignment. Every student has his/her own card. It is the result of what the **Let Me Learn** instrument tells every student.

As can be seen from *Figure 1* (the top part is the card), students are trained to enter their Learning Combination Inventory scores on their Power Card. I do not like this idea as I believe that while it is important to know in which category the students fall, it is not necessary for them to keep thinking of the score. Students tend to consider these numbers as marks which need to be improved. The whole concept is that the **Let Me Learn** is not a test, hence the Power card is not the report of a test.

The students at the presentation kept repeating these numbers as if they were in fact marks. One student who fell into the Bridge category felt really frustrated as he could not improve on his marks. However it was very obvious that the students could use their different patterns effectively while working in groups. They were also very used to working in groups and certainly knew what they were doing. In fact they were very proud to be able to share what they learnt at school with the whole group present.

During another session we were given a view of to the Grady Profile which focused on the idea of alternative ways of assessment. This Profile is an electronic portfolio used in schools for students. At

Figure 1

Sequential	Precise	Technical	Confluent
Score:	*Score:*	*Score:*	*Score:*
*Organize *Order *Compare *and* Contrast	*Details *Describe *Facts/Reasons *Examples	*Construct *Draw *Illustrate *Experiences	*Imagine *Unique *Create
**	**	**	**

** In these spaces the students will write their own notes, depending on the results received from the **Let Me Learn** Instrument. The following examples will serve as guidelines for the students:

I avoid Confluent.
I should:
· *not worry about mistakes;*
· *think about different ways to complete the assignment (**Be Creative**);*
· *take small chances;*
· *use time wisely.*

I avoid Sequential.
I should:
· *determine what the question/task asks before I start;*
· *break down the task into beginning, middle, and end;*
· *make a plan;*
· *stay on topic;*
· *use time wisely.*

I avoid Precise.
I should:
· *take notes if I can;*
· *underline key words or phrases;*
· *eliminate answers and use reasoning rather than guessing;*
· *look for information or facts;*
· *use time wisely.*

I avoid Technical.
I should:
· *think about how things work;*
· *use my experiences;*
· *picture it in my mind;*
· *take a break when I can;*
· *use time wisely .*

I am a bridge person, but sometimes I need to:
· *examine the task to see what I need to do;*
· *break down the task into a beginning, middle and end;*
· *plan how I am going to do it;*
· *stay on topic;*
· *use time wisely.*

present the school administration in Maltese schools are using a detailed database program for information about staff and students. In some schools this is also used for time-tabling. As the Grady Profile is quite similar, one might explore the possibility of improving on this already existing tool in the Maltese schools. Maybe it can also be used as a metacognitive tool in order to help build students' portfolios.

During the final presentation by Dr. Christine Johnston, emphasis was placed on the fact that students learn better while working on set tasks. This is because students will practise problem-solving skills which is somewhat lacking in teaching. Schools often tend to identify pupils as deficient learners and try to remedy this by giving tests or using prescriptive learning as rehabilitation. One important message I received during the LML Institute was the following:

When you place a flower in a shady spot, it naturally will bend toward the sunlight that it needs.

No one says to the plant, "Why can't you be happy where I put you? Why do you have to cause trouble?"

Yet, when a student needs a different kind of learning, he or she is told to stop causing trouble and do it the way everyone else is doing it.

I invite you readers to ponder on this thought!

Hence **Let me Learn** is about giving the student the ability to grow and be prepared for the world after school. This is being done by giving the student a voice, a vocabulary and above all the training in critical thinking to become the capable learner notwithstanding him/her being different.

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PUBLICATIONS

Opening Doors to School Improvement: An Introductory Handbook

Christopher Bezzina (MUT Publications, 1999)

*(Siltiet mid-diskors editjat ta' **Dr. Ronald Sultana** fit-tnedija tal-ktieb fl-4 ta' Ġunju, 1999)*

Il-qofol ta' dan il-ktieb hija l-ħarsa lejn dak li qiegħed iseħħ u jinkiteb internazz-jonalment. Ħarsa ta' dan it-tip tgħinek tagħmel ċerti punti meqjusin li jġegħluk tirrifletti fuq sett t'għanijiet. Bħal per eżempju kif se tiżviluppa politika fl-iskola tiegħek sabiex tkun żgur li ma jkollokx assentiżmu. Bħala kapijiet ta' skejjel u mexxejja fil-kamp edukattiv, dan il-ktieb jgħinna nagħżlu l-aħjar triq sabiex nilħqu dan l-għan. Illum l-għalliem ma nistgħux nifirduh mill-kap ta' l-iskola u minkejja li huwa minnu li s-surmast jagħti sehem importanti ħafna, kif fil-fatt jgħid l-awtur, l-għalliema ma jistgħux ikunu iżolati. L-idea li l-għalliema għandhom jingħataw responsabbiltà u awtorità (*empowerment*) akbar hija l-*leitmotif* li tixref il-ħin kollu f'dan il-ktieb.

******

Il-ktieb ta' Dr. Bezzina jagħmel referenza qawwija għall-fatt li għalkemm irid ikollna ... viżjoni globali, it-titjib u l-bidla fl-iskejjel trid isseħħ fi skola wara l-oħra, bidla li minkejja li mhix waħda mgħaġġla, hija aktar dejjiema.

Il-moviment ta' l-*ischool effectiveness*, li jirreferi għalih Dr. Bezzina, huwa kruċjali għalina f'Malta għaliex bħalissa ninsabu fi żmien fejn

hemm qbil li l-idea ta' riformi minn fuq 'l isfel aktarx ma taħdimx, u forsi aktar tagħmel ħsara milli ġid. Dr. Bezzina jitkellem fuq taħlita korretta ta' bidliet li jiġu minn fuq imma li jiltaqgħu ma' inizjattivi ġejjin 'minn isfel' - fi kliem ieħor, konġuntura ta' ħidma fl-istess direzzjoni mis-sieħba kollha fl-edukazzjoni. Rajt diversi għalliema li jkollhom ħafna entużjażmu sabiex ibiddlu s-sistema minn isfel għal fuq, mill-*grassroots*, hekk kif ikunu għadhom kemm bdew ħidmiethom fil-qasam ta' l-edukazzjoni. Jiġri iżda, li wara xi ftit tas-snin ikunu qatgħu qalbhom għaliex ma jkunx hemm sforz min-naħa ta' l-awtoritajiet, u ma jkunux sabu strutturi li jwennsuhom u li għandhom bżonn u lanqas ma jkunu sabu dawk il-persuni li forsi jkollhom aktar esperjenza sabiex jiddiskutu magħhom il-viżjoni ta' fejn ikunu jridu jaslu.

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Il-mudell Skoċċiż li Dr. Bezzina jagħmel referenza għalih u jfaħħru u jgħid li hemm bżonn nadattawh għall-kuntest speċifiku Malti, jitkellem kemm fuq *accountability* u anki fuq sapport. L-analiżi storika u komparattiva tal-professjoni ta' l-għalliema turina li gvern li jkun għaddej minn kriżi
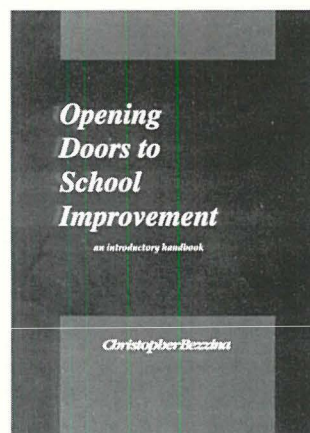
ħafna drabi jfittex lil xi istituzzjoni fuq min ikun jista' jitfa' l-ħtija u wħud mill-aktar *scapegoats* li huma l-aktar inklinati li jieħdu t-tort huma l-għalliema nfushom. Dan iseħħ f'kull pajjiż. Il-falliment ta' gvern sabiex isolvi problemi ta' illitteriżmu, ta' kriminalità, ta' droga u anki ta' valuri, ħafna drabi jkun attribwit lill-għalliema. Dan huwa mod kif gvern jesporta problemi - li ħafna drabi jkunu ekonomiċi - fuq il-professjoni vulnerabbli tagħna. Għalhekk il-mudell li kien adottat Malta, u li dan il-ktieb joffrilna gwida ta' kif nistgħu nattwalizzawh, huwa wieħed li jirrifletti serjetà u li jemmen fil-prinċipju li biex wieħed jagħti l-aħjar li jista' lit-tfal, irid jirċievi wkoll is-sapport. Mhux inkissrek bil-kritika, iżda ngħinek tinbena. U dan il-ktieb propju jagħmel dan. Għalhekk huwa ktieb li nħoss li l-vokabularju ċentrali li jidher fih, kliem bħal *empowerment*, ristrutturaz-zjoni, diċentralizzazzjoni, *reflective practitioners*, devoluzzjoni u *school site management* - jagħmlu sens għaliex magħhom hemm marbuta viżjoni aktar globali, viżjoni demokratika, umanistika u personalizzata. B'hekk il-kelma valuri hija importanti għaliex kull ma jmur m'aħniex niffukaw biss fuq kif se nwettqu l-bidla iżda wkoll għalfejn inkunu se nwettqu dik il-bidla partikulari.

Dr. Christopher Bezzina, Dr. Ronald Sultana u Mr. John Bencini (Chairperson ta' MUT Publications Ltd.) waqt it-tnedija tal-ktieb fl-4 ta' Ġunju, 1999

Ritratt bil-kortesija ta' *The Teacher*

Democracy in Schools: Setting up of Students' Councils & Class Committees

Mary Rose Mifsud (Education Division Millenium Committee, 1999)
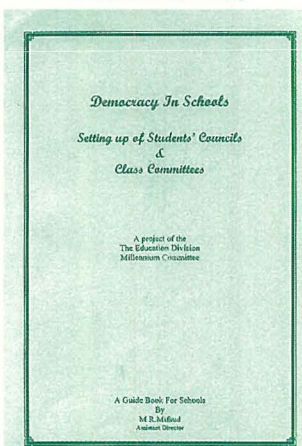
(Edited excerpts from the introduction to the book)

One of the aims of the Education Division Millennium Committee, is to encourage the introduction and practice of democracy in schools. Democratic schools are open schools, places where each stakeholder participates freely in decision-making and decision-taking.

This booklet is intended as an introductory guide for both the administrative and the teaching staff in schools. It is divided as follows:

Section One: Introducing Students' Councils & Class Committees - The rationale behind the setting up of councils and committees in schools, connecting these with students' education.

Section Two: Addressing Attitudes - Intended mainly for teachers, consisting of a number of lesson plans to help teachers set the scene by addressing students' attitudes.
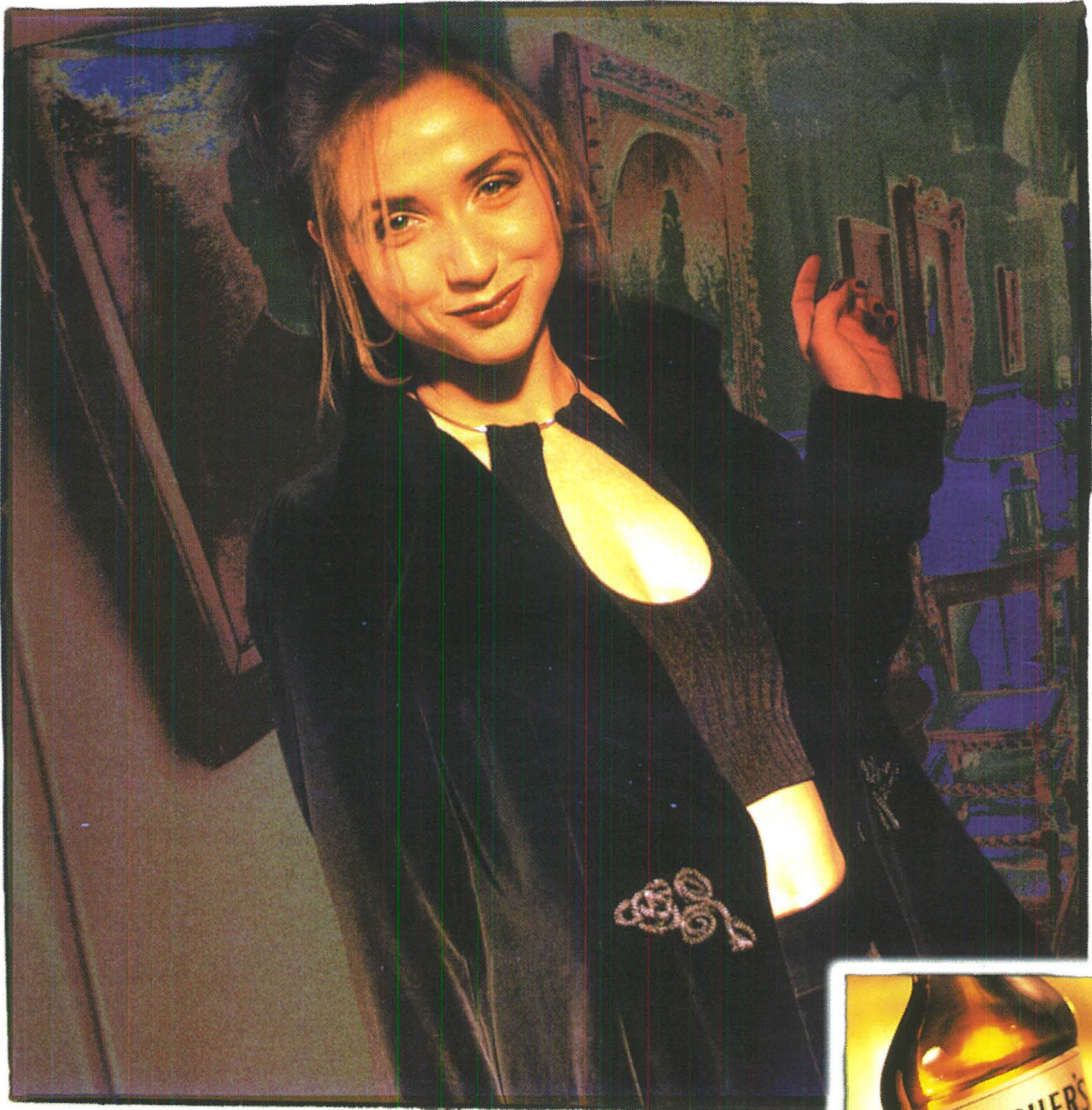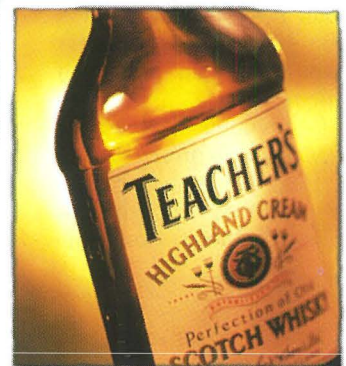
Section Three: Imparting Knowledge and Skills - Contains curriculum resources to help teachers impart the basic knowledge and skills which are necessary for a successful functioning of the council and the Committees.

Where does character come from?

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TEACHER'S
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The importance of evaluating children's reading books

M'Louise Borg

R eading books are considered by educators as one of the main tools necessary in the development of children's literacy and cognitive skills. It is because of this role of books, that researchers and educators world wide emphasise the importance of selecting the *right* type of books for children.

> ❝ **In the modern world books compete with more alluring media such as the television, the video and the computer** ❞

M'LOUISE BORG has graduated with a B.Ed (Hons.) degree in English from the University of Malta (1999). Presently she teaches at St. Monica school. Her research interests are in the teaching of reading and literature to young learners.

At face value this might seem a simple and straightforward task that anyone can perform by merely opening the book that is to be read by the child and taking a peek at the words printed inside. Some believe that by simply reading the review of the publishers on the back cover of the children's book, one can get to know the value of what is inside. In reality however, evaluating a reading book requires more serious reflection.

Before one can embark on an evaluation of a book, one must first of all keep in mind why the book is being read. Is the child about to read the book merely to pass his/her time during the holidays and therefore as a form of recreation? Is the child reading the book in order to improve on his/her reading skills, which may perhaps not be at the desired level? Or is the child reading the book as part of a reading scheme used by the school?

All three instances require a different approach to the evaluation. If a child is to read a book merely for enjoyment then the book chosen should have a good story line that will entice the young reader to continue reading. The West Sussex County Council of the UK (1976) in a report on the importance of reading and literacy emphasises the need for reading books to have a highly interesting content in order to motivate children to view reading positively. If the content of the reading book is boring then the child will be reluctant to continue reading and in time there is the danger that the child will be put off reading completely.

Research such as that of Southgate et al (1981) show that children of different ages prefer different type of stories. Older children tend to prefer mystery and adventure stories, while younger ones tend to prefer fairytales. There is also a percentage of children who prefer to read non-fiction rather than fiction. When choosing fiction Pagett (1990) suggests, that the story should not only be interesting but should also show the 'struggle between good and evil, cruelty and compassion'. According to the same writer, children's books like those of adults, should reflect 'fundamental fears we all have' and also our 'fundamental longings and aspirations'. When selecting books for children these considerations should therefore be kept in mind.

Another important aspect of book evaluation is the level of difficulty of the book.

When a book is being read for amusement, Southgate et al (1981), advise teachers and parents to select what is termed as *Independent* reading material. This implies that the child should be able to read the book chosen, independently of adult assistance. This however, does not mean that the book should be much below the reading capabilities of the child. A very easy book can also contribute to boredom. A child reading independently means that he/she does not have to stop too often to ask the meaning of words or of complicated sentence structures. Parents or teachers should make sure that the child is understanding the story by occasionally asking her to recount what is happening.

Other features of book assessment include an examination of the quality of the book with respect to physical appearance. Reading researchers world-wide consider the presentation of content to be of vital importance in motivating children to read. Front covers, book size and thickness, print size, illustrations and paper type are all aspects that may influence the children's desire to read the book. Hedge (1985) explains that often the front cover format may be the main reason why children pick up the book in the first place. Old books with yellowing and torn pages will not promote much reading enthusiasm.

Competitors of books

Adults encouraging children to read have to be aware that in the modern world books compete with more alluring media, such as the television, the video and the computer. A colourful book with glossy easy-to-turn pages and a good font stands a better chance in this competition. Font size and type are also crucial aspects, as children can easily be put off if these are not right. For children just beginning to read, the size of the font has to be large enough so that each page in the book will not seem to be too full of print. Too many graphics on the page may seem daunting and may put off even the older child who is a poor or reluctant reader. On the other hand, children who are post-beginners should be able to read different type of fonts with ease.

Illustrations are another important aspect of children's reading books. Fenwick (1975) claimed that children of primary school age

preferred books that had between 10-20% of the content taken up by pictures. Publishers include illustrations for different reasons. Some illustrations are used merely for motivation and others are necessary to facilitate understanding. In both cases the importance of clear and relevant pictures cannot be underestimated. Irrelevant pictures may mislead children and they may end up misunderstanding the content especially where the book is non-fiction.

When a child is reading the book not merely for entertainment but in order to improve his level of reading, then a more careful choice of book is required. Although in this case aspects of book content and its presentation mentioned above are of great importance, of even greater importance is the level of the book and the reading age of the child. Reading age of the child may be different from chronological age and needs to be established by the teacher or educator. There are tests that a child can undergo in order to establish his level of reading. Books chosen for this child should match his reading age.

Durkin (1980) and Southgate et al (1981) suggest that the teacher should not only know the reading age of the children but should be knowledgeable about the readability levels of materials used by individual children. The readability level of the reading books can be determined by using readability formulae of which the most popular are the *'Fry's Formula'* and the *'Spache Test'*. Use and application of these formulae can be found in texts concerned with the teaching of reading. These formulae are arrived at by looking into the vocabulary, sentence structure and content of books.

The teacher should therefore analyse the contents of the reading books with a view of establishing the degree of difficulty of the vocabulary as well as the type of sentences used. If the book is aimed at elementary school children then a certain degree of repetition is desirable. For the older children in the upper primary classes, Hill and Reid Thomas (1989), suggest that diversity of vocabulary is profitable as this helps to extend the children's knowledge.

Sentence structures should also be examined as these can cause lack of comprehension. Reading research has shown that learning to read with understanding is constrained by many factors, especially in the early stages. Chomsky (1969), Slobin (1971), Smith (1974) and Beaumont (1982) argue that complex sentences may be difficult to process. The greatest difficulty arises when the clause in the complex sentence is centrally embedded. In the case of subordinate sentences the difficulty arises when the subordinate sentence is not introduced by a subordinator. All this necessitates a proper perusal of the book before it is given to the child to improve his reading skills.

Instructional level materials

Books that are to be used to extend the child's reading skills should not be at the Independent level, but at the *Instructional* level. In this case an adult should be available to assist the child should the need arise. Instructional level material helps to keep the child challenged and motivated and to extend his reading skills. It is with the use of such material that a child with the help of an adult is led from one reading threshold on to another.

If the books being used for instructional purposes form part of a reading scheme then the reading scheme should be evaluated. In their criteria of selecting a reading scheme, Southgate *et al* (1972), emphasised the importance of ensuring that the author's 'beliefs', 'aims' and 'principles' backing the scheme are the same as those of the teacher/school using it. They suggest that the conditions imposed by the authors have to prevail in the classroom if the scheme is to be successful.

Others such as Rosen and Rosen (1974) are sceptical about reading schemes in general. They believe that because of the widespread use of reading schemes and the dependency on them, children have come to believe that all books are written in the same style as these books. Reading schemes need to be evaluated because as Obrist (1981) claims, there are occasions when the publishers of reading schemes are more concerned with fitting the text into a particular scheme, than with providing material that is interesting and motivating for reading.

As has been seen, whatever the reasons for reading, evaluation of books is a necessity. Local research such as that of Camilleri (1998) has shown that Maltese children need to be motivated to read more, as at present much of what they read is in the form of school textbooks. Ensuring that the books children choose to read are motivating and intriguing is therefore necessary in order to stimulate their curiosity and their love of reading. Evaluation of material for reading should be an ongoing process because children should be encouraged to read as many books as possible. It is important that parents and teachers keep abreast of modern times and consider also alternative forms of texts, such as books on CDs. Reading materials on computer software may be an alternative resource for the reluctant reader and should also be considered as relevant texts provided these have been thoroughly investigated.

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The Faculty of Education

A glance at its past, taking stock of its present and a vision for its future

Mark Borg

Preamble

It was not without some degree of trepidation and hesitation that on July 12th of this year I formally embarked on my four-year term as Dean of this Faculty. You will, I am certain, forgive my initial fears and concerns once I have shared with you the following three reasons.

First of all, it is a long-established fact that our Faculty is by far the largest faculty at our University. Its 'largeness' reaches out in more directions than one! We have, hands down, the largest number of full-time and part-time students registered on our wide-ranging programmes. In addition to this, and understandable so, we make up the largest college of permanent and temporary members of academic staff. It is often said that 'big is beautiful' - that may or may not be the case depending on how one looks at things. 'Big' brings with it more responsibilities and more, far more, problems, headaches and heartburn.

> ❝ There is much that the Faculty has done, is doing, and can do for the good of our educational system. The list of targets is long. The ugency is great. Let us get on with the job. ❞

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Secondly, in assuming the role of Dean I have a very, very tough act to follow, in most ways. The two-year term of my immediate predecessor, Ronald, was marked by what must have been the most intense period of planning resulting in the most radical changes to the Faculty's most central programme - the B. Ed (Hons) degree. Never before in its then 18-year history has the Faculty been faced with a challenge of this scale. In its 18th year the Faculty decided to embark on a road which lead to an overhaul of the entire philosophy of its initial teacher training programme. This is very recent and familiar history: as all of you well know, we embarked on two and a half years marked by intense research, meetings and negotiations. The result was the launching in October of the new B. Ed (Hons) programme - a programme which is moving away from producing a *generalist* teacher to one geared towards developing a *specialist* teacher. The dynamism, wisdom and commitment that have marked the deanship of Dr Ronald Sultana are not easily emulated.

Third and last reason. I strongly believe that in the next 5 years or so the Faculty will have the opportunity not only to renew itself but also to consolidate its position on the local as well as on the foreign scene. It will also have to address a series of challenges the outcome of which will determine to what extent our Faculty will remain meaningful to our educational system, and to what extent it is so. This brings to mind what a former consultant of the Education Division is reported to have said about our Faculty. This good soul of wholesome Canadian stock had said that "the Faculty of Education is insignificant to the Maltese educational system". A serious and grave indictment by any measure! Irrespective of whether you agree with this statement or not, the fact is that the Faculty is still here playing its part to the best of its ability, for better or for worse. The good soul with his acumen for value judgements is consulting the Education Division no more.

A Glance at the Past

You will, I am certain, allow me to begin this my first official statement as Dean by openly thanking all my predecessors for the hard work they have put in for the good of the Faculty.

● Professor Charles Farrugia, one of the founding fathers of the Faculty and its first and longest-serving Dean.

● Professor Kenneth Wain, also one of the Faculty's founders, who brought a tinge of philosophy to the deanship. (Also fondly referred to as the Faculty's own 'Moses' - and this has nothing to do with his white mane.)

● And, of course, Dr Ronald Sultana, my immediate predecessor and a Dean with mission if there ever was one, and for whom I had the distinct honour to deputise and with whom I worked so closely.

All of these deserve our most heartfelt thanks and gratitude. At the same time let us not forget those from amongst the first generation of academic members of staff who have either retired and are now enjoying a hard-earned rest (namely Joe Bugeja, Denis Cuschieri, Mary Rose Gatt, Joseph M. Falzon, and Anthony Schembri), as well as those who are no longer with us - Anthony Calleja and Michael Sant immediately come to mind with a sense of deep fondness and respect.

For good reason, I consider myself the oldest member of the second generation of academic members of staff. Arguably, I also have the distinct honour of having been the first former B. Ed student to join the ranks of the Faculty, way back in 1984 - come February I will turn 'sweet 16'! I am equally proud that, in its 20th year, I have been called upon to serve this Faculty as Dean. It is a distinct honour for which I am very grateful.

Like a dynamic, healthy organism, the Faculty has changed and developed over the years. In many instances this change has been for the better; in some instances, however, I have my doubts. Let us be clear about one thing though - the Faculty never had any handouts and/or privileges showered upon it. It never figured in the good books of the powers that be, either. I have always argued that the Faculty was born under an ominous star and that we had to suffer for that. The Faculty has had to win every millimetre of the widespread respect and credibility it now enjoys. With hindsight, I find it truly ironic that the very practices that our Faculty introduced to this University, and for which for many years we were the butt of jokes and ridicule showered upon us by colleagues from other Faculties, have now been institutionalised and are now practised by one and all. Study-units and the credit system, unit course outlines, academic year programmes - the list is endless.

Taking Stock of the Present

The collective professionalism, commitment and tenacity that the Faculty has manifested over the years has seen us through. We are, undoubtedly, one of the better organised, most dynamic and forward-looking Faculties. We have earned the respect of colleagues on the home front and from overseas. Slowly but surely, over these 20 years we have been

able to build a research profile that is second to none and the envy of many. Research based in the Maltese educational settings has found its way in the very best international journals and conferences. Some of us have even established themselves as internationally-acknowledged experts in their field. And that is just the beginning! Just after 20 years.

When one looks at the constellation of established, budding and potential researchers that grace our Faculty one should truly have reason for looking at the future with great optimism

and courage. But, strangely enough, here may also lurk a veritable danger that the Faculty must face and overcome.

Allow me to explain myself better. I believe that each member of staff has the right for the space to develop his/her potential, even if this means using the Faculty as a launching pad or as a means of scaffolding. I see nothing wrong with that as long as one gives something to the Faculty in return. I for one, for instance, would not mind a bit spending all my working time reading and doing research. I derive immeasurable joy from this and I suppose I possess the required skills and intellectual properties. But then what about my contribution to the preparation of future teachers and psychologists? Or my contribution to the administrative sphere? Clearly, this is where the potential danger lies. Every member of this Faculty has the responsibility to

contribute to each of these spheres to the best of his or her abilities.

I have always believed that one of the greatest strengths of our Faculty is its collegiality. There have been, there are, and there will always be differences among us. That is perhaps inevitable. But ultimately, we get down to business and get the job done. That is the essence of persons who are truly professional. There are several examples of 'balkanised' Faculties which should serve as an eye-opener to us all. The choice is clear. We either strengthen our collegial ties and continue working hand in hand or we can all go our separate ways - that is, balkanise the Faculty. Each one of us has responsibilities in this regard and must, willingly or begrudgingly, shoulder them. The choice is ours.

Not that we do not have a shady side to our Faculty. Apart from the national pass-time - complaining about everything under the sun - I believe that this is primarily characterised by the rampant rumour-mongering that roam the dark and stuffy corridors of the Old Humanities Building. If some of this rumour-mongering were not purposely malicious it would not be worth mentioning at all. The truth of the matter is that some, for reasons which they know best, seem to thrive and derive joy from the harm that this does and the disquiet it creates. I know full well what I am saying - it is a mere handful who either never really valued the collegial spirit that the Faculty enjoys and/or who places personal gains before the common good of the Faculty. Those who have the Faculty and what it stands for at heart know better than to generate and perpetuate this malevolent trait. In my first few months as Dean I have not been spared this rumour-mongering. I could easily consider this as an occupational hazard, ignore it, and get on with the job. I would rather, however, have people come to my office and give voice to their grievances and concerns than having them spinning all sorts of rumours which do no good to anyone. I still have the habit of leaving the door to my office unlocked. I feel that in spite of a very heavy schedule, all members of staff and students should have direct, and if need be, immediate access to their Dean. Most often than not I am only a

knock-on-the-door away! I assure you, I will always have time for you and to listen to what you have to say.

In spite of these and other weaknesses I have no doubt whatsoever that the Faculty is well prepared for the challenges ahead. I say this because when it all is said and done the Faculty has the clout, substance and commitment that this will take to address these challenges.

Some Immediate Challenges

What are the immediate challenges we have ahead of us? Clearly, we need to continue where we left off. We need to continue with our work on the new B.Ed (Hons) programme with renewed energy and commitment, to draw the various strands together. Apart from ensuring that the entire academic programme is complete, there are a number of issues which warrant our immediate attention. The final degree classification exercise and the criteria on which this should be based alone should keep us very busy for the rest of this academic year.

The many initiatives that the *Tomorrow's Teachers Project* generated must be sustained and supported by one and all. Some excellent work has already been done in the various areas such as student assessment, modes of teaching, RICTE, staff-student socialisation, and mentoring. I have already taken steps to ensure that the various committees are reconstituted so that they can continue with their work. The committees should know that they have my fullest support and I look forward to their recommendations and advice about the way forward.

One immediate challenge which the Faculty cannot afford to ignore is the introduction this October of a three-year honours degree by the Faculty of Arts. Although one may read as much as one likes in this 'move', my major concern lies with the impact that this may ultimately have on the teaching profession *per se*. Entering into the profession through the Masters route with no training whatsoever in pedagogy will become a rule rather than the exception. The implications of this loom heavier in view of the teacher glut that we will have to come to terms with as from next year. Great efforts have been made to absorb the

number of new B. Ed (Hons) and PGCE teachers these past two years. There is a limit, however, to how much more contortionist acts the Education Division is capable of in this regard. I have already taken the initiative of establishing contacts with the MUT on the matter and I was promised all the support that the union can muster. It still needs to be seen how the whole issue should be approached.

A related issue of sorts is the question of the PGCE. Should we stop offering it altogether? Should we offer it every other year? Given that the general feeling is that the PGCE is far too crammed and intense to serve its purposes properly, is it not the time to lengthen it accordingly? If so, should this be 'forward-directed' or 'backward-directed'? A report to this effect is currently being prepared by Dr Joseph Fenech, PGCE co-ordinator. Whatever decisions we take for the immediate term, we simply cannot be impervious to what is going on in the teachers' labour market. We cannot ignore market forces.

It is perhaps a truism that during the last years, in our enthusiasm to turn a new leaf in our relationship with the Education Division, we have often bent over backwards to manifest our good will to Division officials and our wish to build bridges between the two institutions. There are several of us here, including myself, who believe that our efforts have not always been met with the same measure of enthusiasm and good will. Perhaps we have not tried hard enough; or perhaps our strategy was misguided. The point is that the relationship between us falls short of the partnership in the education enterprise that most of us would like to see. There are, of course, several examples which show that things can work out well for the common good. If my memory serves me right, Education Division officials take an active part in the Assessment and Teaching Practice committees. However, I believe that much more can and needs to be done in this regard.

Some Medium-Term Challenges

So far, the Faculty has primarily been concerned with preparing teachers for the compulsory school years. The needs of the country demanded that we should concentrate on initial teacher training for the 5 to 16 age bracket. Although we have done well to concentrate on this, and we have gone all the way to evaluate and renew our efforts in this regard - the new BEd(Hons) programme attests to this - there is no doubt in my mind that we have to extend our efforts in at least three directions: the pre-school years, post-secondary & technical education, and professional development.

The pre-school years

Although there have been attempts to assume responsibility for preparing kindergarten assistants (a task which up till now has been carried out by the Education Division with input from some of us here present) - an attempt which unfortunately faltered for reasons we do not need to go into here - I believe that this should be a top priority objective. Surely, you do not need me to tell you how important the early years are for the development of the child! It is perhaps propitious that just as we now have started to prepare primary track teachers to specialise in the early years (thereby, effectively opening up the kindergarten sector to fully-trained teachers, apart from the infant years), we should also go a step further by taking responsibility for the training of kindergarten assistants as well. Not that we are not already preparing for such a step. Much is being

done in this regard. Suffice it to point out that one of this year's External Examiners is an expert in the education of in the early years education.

Post-secondary & technical education

These too are areas which demand further and solid commitment from the Faculty. We need to study carefully what direction our contribution to the area of post-secondary education should take. No less pressing is the fast-growing area of technical education - an area which to my knowledge is earmarked for special attention in the proposed new National Minimum Curriculum, as indeed are several other crucial issues which cannot but be addressed immediately.

Professional development

As a Faculty of Education, the professional development of teachers cannot be but at the very heart of the Faculty. If by professional development we mean *pre-service*, induction and *on-going* education then, strictly speaking, we are catering only for the first phase of training and academic programmes at the post-graduate level. Clearly, this position is no longer tenable for reasons which I shall expound. First, how can we continue to be credible advocates of lifelong education unless we as a Faculty ensure the continuing professional development of the teaching community? Second, if the looming glut is realised in the years to come then we may find ourselves having to direct some of our energies to new initiatives. I believe that there is a great deal we can offer in the induction phase as well as to the on-going development of teachers. I have little doubt that the demand for in-service training will increase exponentially and, sooner or later, the Faculty will be required to assume part of the responsibilities in this regard. The demand is there. The choice is ours.

Not that there are no more challenges. Suffice it to mention the need to develop:

● the area of Resources and ICT in Education (RICTE) - we need this as much as we need oxygen to keep our ticker going!

● the Faculty's relationship with the schools out there - our training ground. We cannot keep perpetuating the fallacy that we are doing them a favour by training future teachers or that they are doing us a favour for allowing our students in their schools. The truth of the matter is that we need each other's support. I strongly believe that we need to develop further the notion of a partnership with the schools involved within the framework of the Professional Development School initiative.

So on and so forth. There are, of course, many other matters which deserve mention but which it is not possible to consider here.

Conclusion

Although the challenges ahead of us are many and varied, the Faculty has the will, courage and commitment to meet all of these challenges. But 'will, courage and commitment' will not suffice; as mathematicians like to put it 'they are necessary conditions but not sufficient'. These noteworthy attributes must be matched by more academic and support staff as well as by the whole plethora of material resources (including office space) that such initiatives entail.

There is much that the Faculty has done, is doing, and can do for the good of our educational system. The list of targets is long. The urgency is great. Let us get on with the job.

An example of Newton's Third Law of Motion

Suzanne Gatt

This article outlines the factors which may make Physics a difficult and demanding subject for Maltese secondary students. The constructivist approach currently adopted by educators world-wide is described and a scheme, developed and tried out to help Maltese Junior Lyceum students understand Newton's Third Law of Motion, is described. The use of cognitive conflict, scaffolding and the social construction of knowledge in this scheme are illustrated through the activities designed. Finally, the students' reactions to this approach to teaching, and to the particular activities adopted are included.

> **Physics is considered to be one of the most difficult and demanding subjects at secondary level**

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Physics is considered to be one of the most difficult and demanding subjects at secondary level. This is reflected by the limited annual pass rates of 55 to 60% at SEC level.

A variety of factors are considered to contribute to the image attributed to Physics. Fear of the subject, the mathematical and conceptual demand, and the overcrowded syllabus are among the main causes often identified.

· **Fear of the subject:** Many students experience anxiety about learning Physics before formally studying it at school. This feeling is usually passed on from year to year as students are made to believe that Physics is only for the 'brainy' students who are usually top of the class. In addition, Physics tends to be considered as a boys' subject, putting girls off it.

· **Mathematical Demand:** Physics is full of mathematical formulae. Students are faced both with the difficulty of manipulating numerical examples and with translating relationships from equations to real physical situations. Whoever is weak in mathematics will, therefore, also tend to be weak in Physics.

· **Conceptual Demand:** Physics involves many abstract and complex concepts. Mental models representing and explaining physical phenomena require a high level of thinking which many secondary students would have not reached by that age (Shayer & Adey, 1981).

· **Long Syllabus:** Teachers are often faced with covering large chunks of knowledge in the limited time available. In order to meet syllabus demands, they often resort to more traditional methods of rote learning and dictating notes, often cutting back on practical work and more meaningful learning experiences. Students will thus be bombarded with too much. Since many of the concepts in Physics are closely linked, if a part is not well understood, problems will be encountered later on.

Effective learning is considered to take place when a constructivist approach to teaching is adopted. It is by now widely accepted that little understanding, if any, occurs when passive methodologies like reading from text books and dictating notes are used. Constructivism considers learning to involve the personal construction of meanings about natural phenomena through the interaction with physical events in everyday life (Driver *et al.*, 1994). As Driver and Bell (1986) write, the constructivist view involves the following aspects:

· **Learning outcomes depend, not only on the learning environment, but also on the knowledge of the learner.** Extensive bibliographies (Duit, 1993) reporting children's alternative ideas in science have been documented in all aspects of science and particularly in Newton's Laws of Motion. No teachers can therefore assume that students do not have any idea about areas in Physics before formally studying them at school.

· **Learning involves the construction of meanings.** Students learn when they try to generate links between their existing knowledge and ideas, and those introduced during science lessons. Teaching must then be designed with children's alternative ideas in mind.

· **The construction of Meaning is a continuous and active process.** Learning involves hypothesising, testing and possibly changing ideas as new phenomena and new ideas are encountered. Thinking is continually evolving and adapting during the whole learning process.

· **Meanings, once constructed, are evaluated and can be accepted or rejected.** It is not enough for students to understand ideas and theories in science. They also need to accept that the model does actually reflect everyday situations and are ready to use it as part of their knowledge.

· **Learners have the final responsibility for learning.** Learning will only take place if students direct their attention to the learning task. The teacher should try and motivate students and to avoid short-circuiting reasoning through closed-ended questions often requiring one single direct answer.

· **Constructed meanings have similar patterns.** This occurs since students also share similar experiences of the physical world and use a common language to describe them.

A practical example

The topic 'motion' is one of the difficult areas in Physics. Students tend to attach an

affective aspect to forces (Watts, 1983), or else consider them to have to do with living things (Osborne, 1985). Students also have difficulty in identifying a force's point of action (Terry, Jones & Hurford, 1985). Force is often taken to imply motion (Osborne, 1985: Viennot, 1979) and that the greater the force the greater the velocity (Driver *et al.*, 1994).

With these problems in mind and taking a constructivist approach to teaching, a scheme for helping students understand Newton's Third law was developed. The scheme was then tried out with fourth form students attending a local Junior Lyceum girls' school.

Concepts included in Newton's Third Law

This law talks about the nature and occurrence of forces and is commonly stated as *"every action has an equal and opposite reaction"* (*Nelkon* & Parker, 1992). In other words, when one object A exerts a force on another object B, this object (B), will in turn, and concurrently, exert a force, equal in magnitude but opposite in direction, on object A.

Let us now consider the commonly quoted example of a block resting on a table. Two sets of Newton's pairs of forces can be identified. The first pair includes the force of the block on the table which is equal and opposite to that exerted by the table on the block. The second pair includes the force of gravity of the earth pulling down on the block (the weight) acting at the centre of gravity of the block, and the force of gravity exerted by the block on the earth, acting from the centre of the earth (figure 1).

Although all four forces identified are equal in magnitude, care must be taken in identifying which force is paired to which. As has been illustrated, the weight of the block and the reaction of the
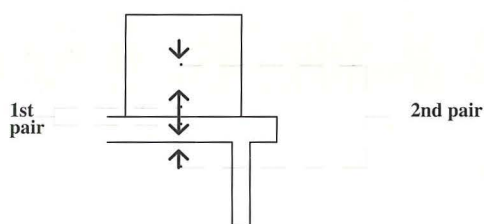
Fig. 1 Forces acting in the case of a book placed on a table (Johnson, 1983, p.109)

table, although equal and opposite, do not form a Newton's third law pair.

Newton's third law highlights a number of properties of forces. Brown (1989) lists these implications as:

· A body cannot experience a force on its own. As already stated forces occur in pairs, always equal and acting in opposite directions.

· Forces arise due to the action of two bodies, when either in contact or at a distance. So, a player kicking a ball exerts a force on the ball during contact. At the same time the ball exerts the same force, opposite in direction, on the player's foot. Similarly, two objects, a distance apart, also experience a force, known as gravitational force, on each other. Therefore the moon exerts an equal and opposite attractive force on the earth as that which the earth exerts on the moon.

· The force exerted by the interacting bodies has the same magnitude at all moments during the time of interaction. For example, the rope between two teams playing tug of war will always experience two equal and opposite forces, even if one team is winning.

· No force precedes the other, even if one body may appear to be more active than the other, as for example in the case of a moving billiard ball hitting another stationary ball. At all times during impact, both billiard balls are experiencing the same magnitude of forces.

The Teaching Scheme

The following section describes how a teaching scheme aiming at helping students understand the properties of forces, has been developed. The properties of forces just outlined are not easily accessible to students due to their elusive and abstract nature. Students, therefore, need to be provided with a number of situations where they are given the opportunity to explore their ideas about forces, leading to the construction of knowledge.

The activities designed and about to be described include particular characteristics which promote the construction of knowledge. These include cognitive conflict, scaffolding and the social construction of knowledge.

· Cognitive Conflict refers to situations where the predicted outcome of an experiment differs from what actually happens. It also occurs when students hold two or more different ideas about a single situation. Cognitive conflict is powerful in getting students involved in the learning activity and motivated in understanding the concepts and reasoning involved.

· Scaffolding Encountering concepts once is not enough to enable students to apply them to a variety of situations. Students, therefore, need to be given guidance in using the newly learnt understanding. Scaffolding refers to the amount of guidance given, and which is gradually reduced until students are capable of tackling the activities on their own. Thorpe & Gallimore (1988) and Hobsbaum *et al.* (1996) argue that scaffolding includes various stages. At first, the performance is assisted by an adult. The cognitive conflict forms part of this stage. The student then needs to attempt the activity unassisted. Mediation is provided only when necessary until performance is 'automised and fossilised' (Hobsbaum *et al.*, 1996, p.29)

· Social Construction of Knowledge Students should be given the time and opportunity to compare and contrast ideas with those of their peers. Social construction can therefore be achieved through talk and discussion, often in groups, of the concepts being learnt.

The Activities

Understanding Newton's Third Law was divided into three main steps, involving:

1. understanding that forces occur in pairs,
2. understanding that forces are equal in magnitude and act in opposite directions
3. being able to identify the forces present in a variety of situations.

Introducing the idea that forces occur in pairs

Students were divided into groups of four to five students, and given a settee spring together with a 2kg weight. They were first asked to find ways of making the spring shorter and longer, to notice what they had to do to achieve this, and to explain their observations in terms of forces. They were then requested to place the 2kg mass on top of the spring and to try and identify what forces they believed were present. The activity led students to appreciate that forces tend to occur in pairs, opposite to each other.
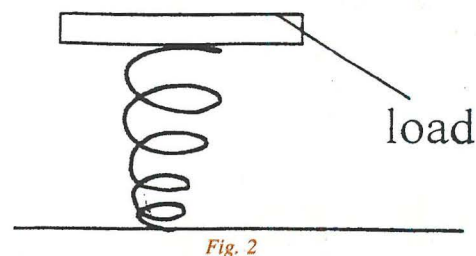
Fig. 2

Forces being equal in magnitude and opposite in direction

The magnitude of the forces was studied through an activity involving the use of spring balances. Students were asked to hook two spring balances to each other and to be held by a student at each end. They were then asked to predict what the two balances would read when (i) both students pulled at either end and (ii)

below.

A   B
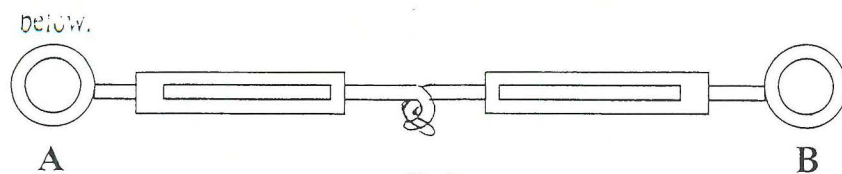
Fig. 3

> **"The teacher is no longer there to dish out knowledge, but to encourage students to struggle with their own reasoning"**

one student pulled while the other kept her hand still. Having put down their predictions, the students then tried out the examples and noted what the actual readings obtained were.

The objective of this activity was to promote cognitive conflict. Many of the students predicted that the balances would read the same values in the first situation, but different in the second, expecting the one who was pulling to be exerting a larger force. The students were intrigued when the second case gave readings identical to the first one. It was easier, then, for the students to understand that the one holding her hand stationary was exerting a force just the same, and accept that paired forces are always equal in magnitude and opposite in direction at any one time.

1. **Decide which are the two bodies exerting forces.**
2. **Check if the objects are in contact.**
3. **Decide on the points where the forces are acting.**
4. **Check that Newton's pairs act in opposite directions.**
5. **Do not forget to comment on the size of the forces.**

Fig. 4

Identifying Paired forces in different situations

Students need time and guidance to gain scientific knowledge. Learning initiated by cognitive conflict just sets the initial momentum. Students need the necessary mediation (Vygotsky,1978) to develop the ability to deal with scientific concepts in different situations. Scaffolding was thus used by presenting students with different situations and asked to identify the paired forces present.

The situations considered involved the Earth and moon, a car on a road, a book on a table and a bowling ball hitting a skittle. A pack of five cards was provided to aid students in identifying the forces. The students read the cards in the order they were given. However, they were free to use as many as they felt to be necessary. This gave students control over the amount of scaffolding they had. The cards were designed so that they would eventually be discarded as students developed strategies to tackle the different examples.

Results

Cognitive conflict was effective in getting the students to think about the action of forces. As expected, many students predicted that the spring balances would give different readings when one of them was held stationary and the other pulled. It was only when they actually read the values that the student who was holding the spring balance stationary realised that she was exerting a force just the same.

The cards provided good scaffolding in helping students develop startegies for identifying Newton's pairs of forces and their point of action. It was observed that all the students read the whole pack when tackling the first example. The cards helped the students to direct their attention to the relevant properties of the situation and to eventually arrive at the pair of forces. The cards were also able to provide differentiation for students with different abilities. The better students used the pack of cards once. They had learnt the strategy to use straight away and so did not need to read through the cards again. On the other hand, weaker students used the cards repeatedly, decreasing the number they needed with each situation until they also discarded them. Overall, by the end of the set of activities, most students demonstrated insight of the various pairs of forces present in the situations considered.

Personal diaries used by students during the whole scheme also shed light on a number of other aspects. Most of the students stated that they enjoyed groupwork much more than the usual teacher talk. As the quote below shows, not only do students feel that the learning atmosphere is less formal, but are also aware that in such a setting, their ideas also count.

"The lesson was interesting because we worked in groups and everyone shared his idea"

Students were also aware of the effectiveness of the role of cognitive conflict. As one student wrote:

"I enjoyed this lesson as it gave us time to think about the experiment before we made it"

Having become aware of their own thinking process shows the effectiveness of the teaching approach adopted.

Conclusion

It is essential to end by emphasising the importance of the role taken by the teacher during these activities. The teacher is crucial both for providing an atmosphere where students are not afraid to express their ideas, and at promoting constructive learning during group work and whole class discussion. The teacher is no longer there to dish out knowledge, but rather, to encourage students to struggle with their own reasoning to try and make sense of physical situations.

The scheme described is just one application of constructive learning to a particular area in physics. If other similar initiatives were to be taken up in other areas of the subject, then Physics would cease to be such a difficult subject and would become accessible to more of our students.

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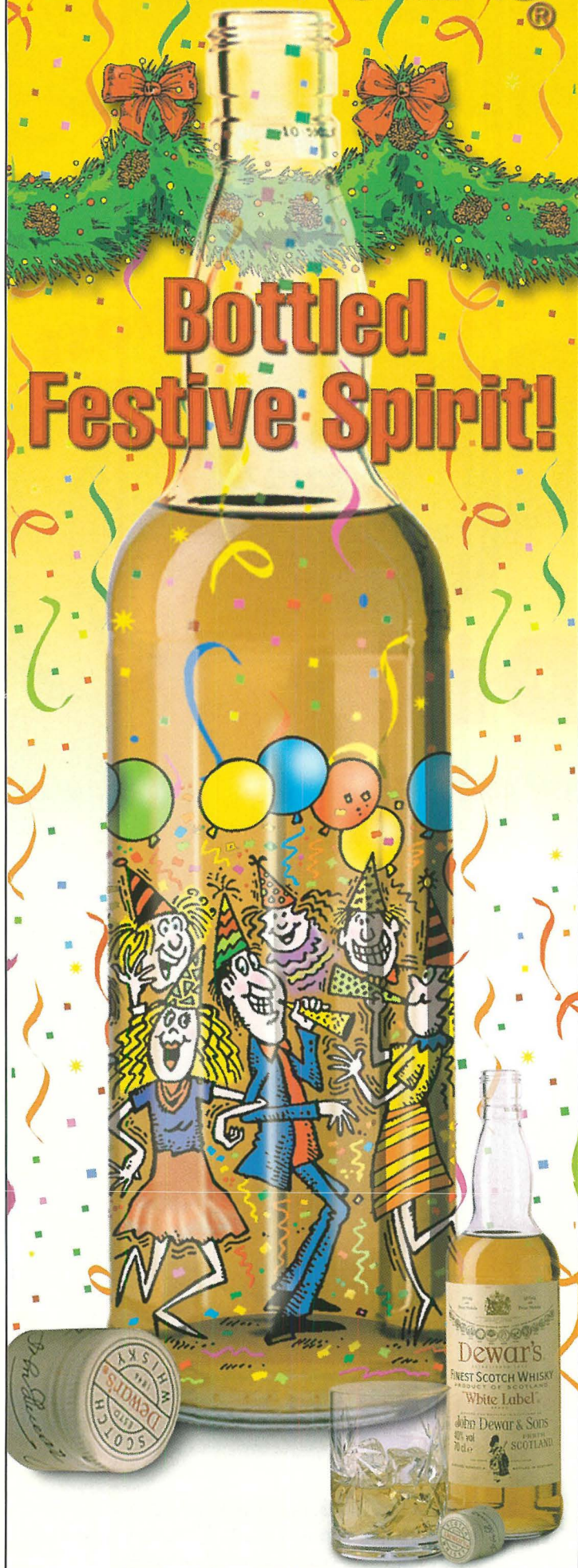
Pictures for discussion

As a service to teachers, *Education 2000* is reproducing a number of pictures - some of well known paintings, others of intriguing cartoons and manipulated photos - that can be used in the classroom to stimulate discussion among the students. This can be done both as a language exercise and as general enrichment for the students.

Reading across the world by Phill Singer (1990)
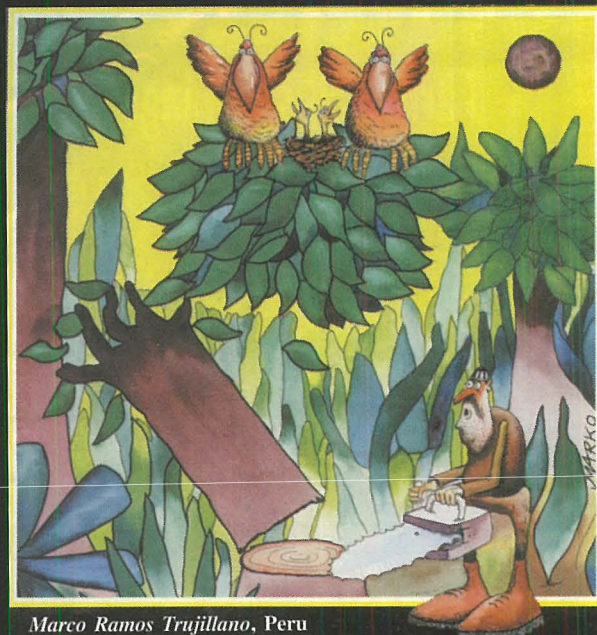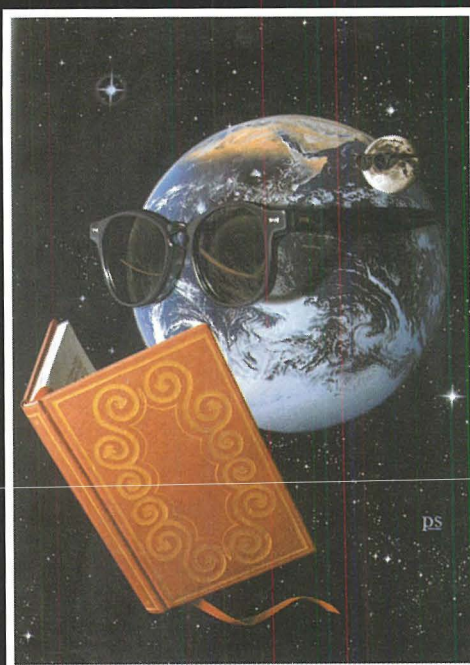
Marco Ramos Trujillano, Peru (*Witty World*, No. 14, 1992)

The Avenue at Middelharnis by Meindert Hobbema (National Gallery, London)

Hand Catching a Bird by Joan Miró (Marie-Laure de Noailles Collection, Paris)
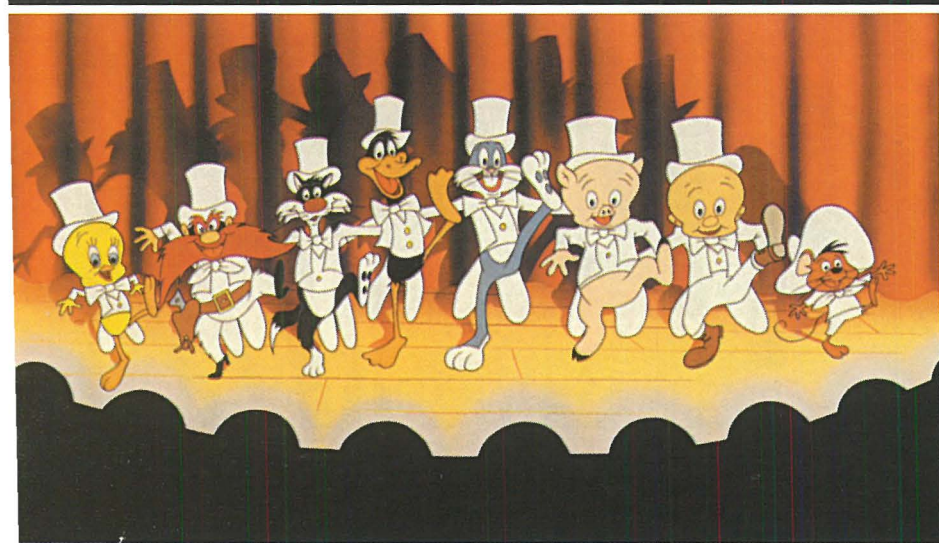
Loony Tunes by *Fritz Freleng* (© Warner Bros.)
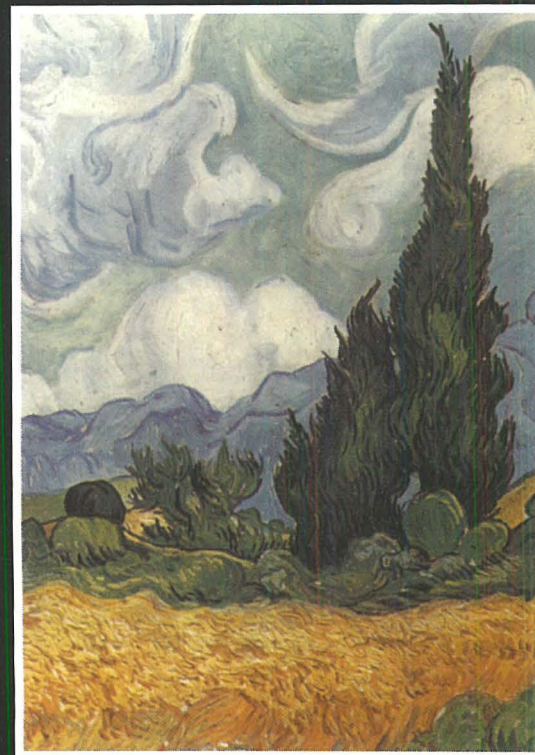
Cornfield and Cypresses by Vincent Van Gogh

Index of *Education 2000* issues 1 to 6

Catherine C. Vella

Author Index

At the end of its third year of publication, *Education 2000* is presenting an author and subject & keyword index that should facilitate finding material in the first six issues

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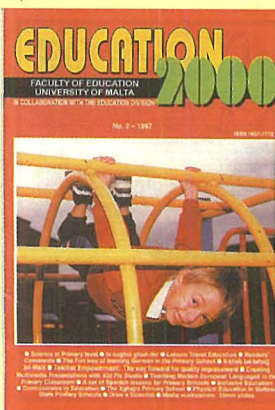
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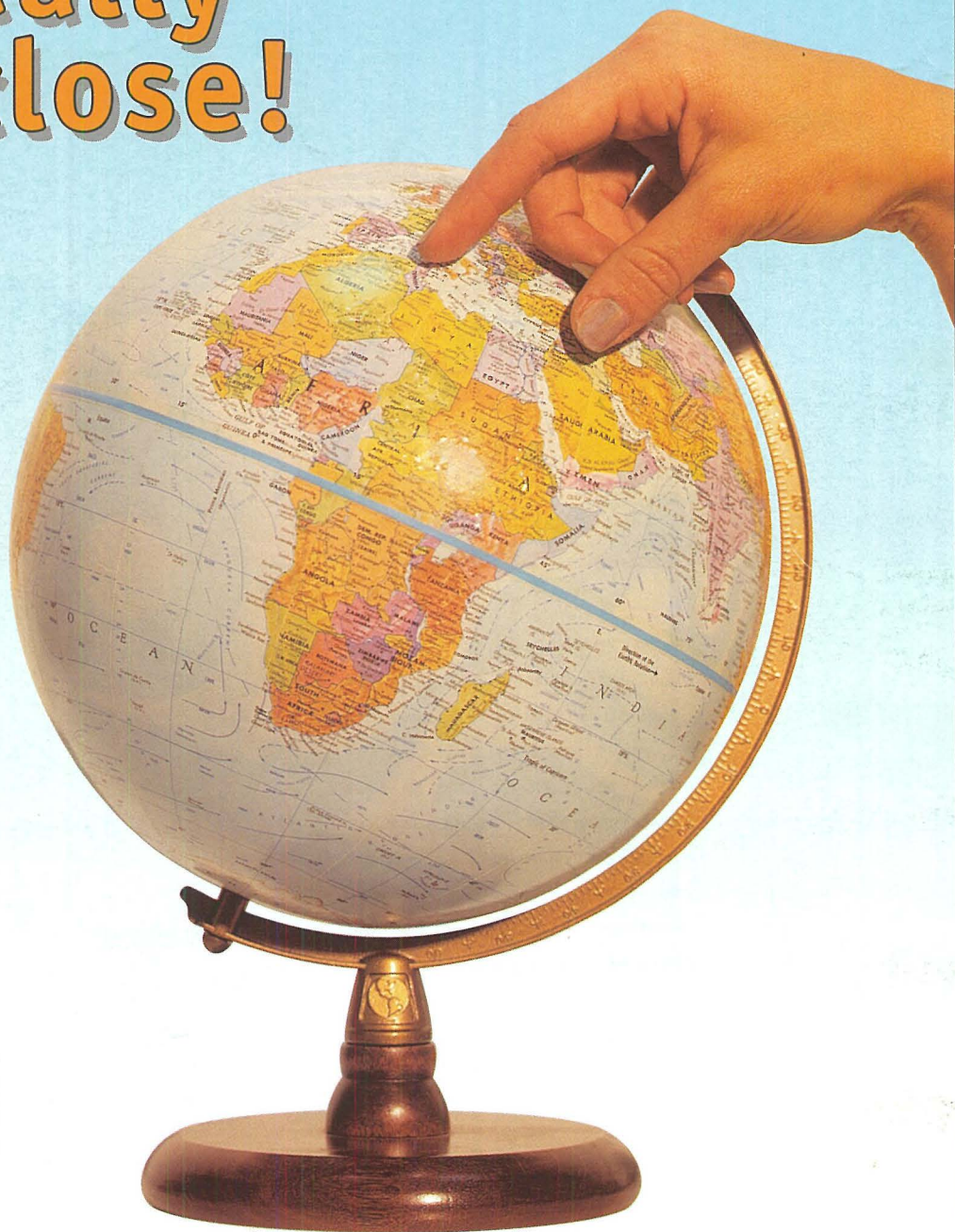
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