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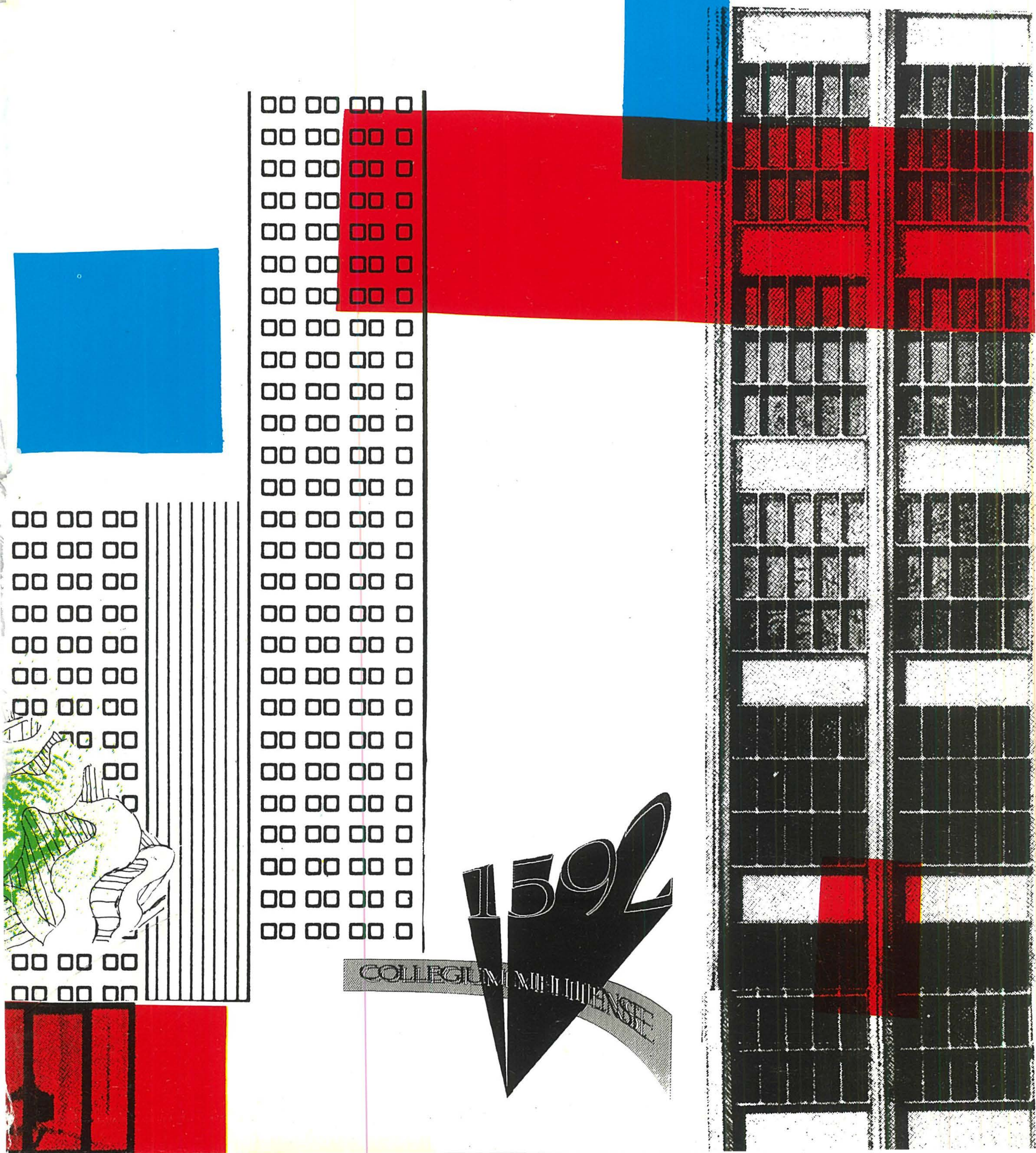

EDUCATION

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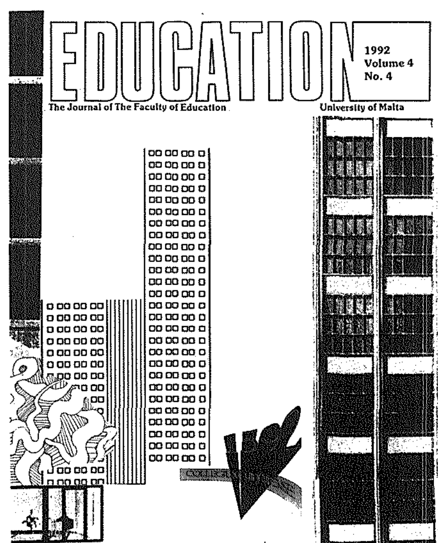

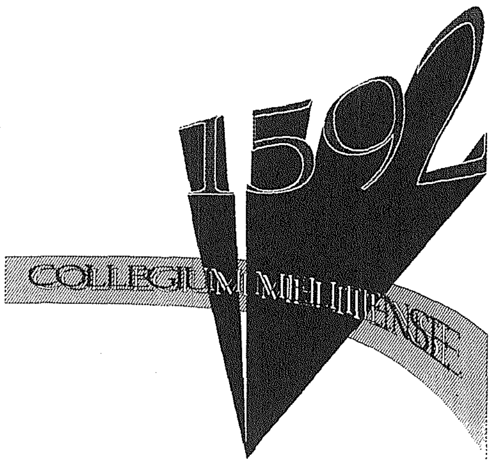

Editorial

In promoting good professional practice and useful and academically rigorous research, the Faculty of Education has for years now sought to raise consciousness on gender issues. In the past, both in Malta and elsewhere differences between women and men were considered natural and not socially constructed. In teaching little attention was paid to the way children of different sexes were socialized into different roles, or encouraged to develop different skills and abilities.

Of late there has been growing concern amongst educationalists that issues of gender must constantly be recognized and that in our teaching and in our research, awareness of difference must permeate our work. To be gender-blind is to deny that difference exists and to endorse patriarchal values that reproduce sexual inequality.

In this special issue of the Journal we have taken the opportunity to provide data and analyses which indicate some of the areas of concern .In the first article I examine the question of mixed and single-sex schooling . With Maltese data and research from other countries I question the conventional wisdom surrounding the different types of pupil grouping. The article by Catania and Portelli is similarly grounded in Maltese primary schools and a thick description is given of activities in primary classrooms that have the often unintended consequences of differentiating between children on the grounds of sex alone. We have been fortunate to receive Delamont's latest review of the British literature on girls' experience of school. Giving emphasis to every -day life as Delamont does allows members of the profession insights into the complexity of working with children of different sexes. The article challenges our taken for granted assumptions about what school means to young people and we are obliged to become reflective about our own practice. Finally Said's paper also takes' girls own definitions and attitudes towards physics as a way into understanding why girls often drop out of this subject or do not take it up even when they are achieving well. Based on ten interviews with Form 4 girls, the article demands that we reconsider some of the methods we have been using in physics teaching.

Mary Darmanin
Guest Editor

Taken together: gender differentiation and mixed schooling

Mary Darmanin

In this article I want to address some of our commonsense assumptions about the education of girls and boys in single-sex and mixed schools. In Malta there has recently been an interest in co-education. People as different as ex-Labour M.P. Ms Carmen Sant (Society, 1991), columnist Daphne on Sunday (STOM, 19 May 1991) and others (including the group of Trade School Heads currently engaged in the Trade School Project) have advocated co-education as a possible solution to gender differences in education

I would like to question the wisdom of such assumptions The focus is on the construction of pupils' gender identities in school, looking at both foreign and Maltese mixed infant and primary classrooms. I have made the point elsewhere (Darmanin, 1991) that able Maltese girls in single-sex secondary schools are achieving as well, if not better than their male counterparts. Despite this achievement however, their aspirations for future careers are still. within traditional feminized spheres. Whilst I have also argued (Darmanin, 1992) that the labour market in itself works as a constraint on girls aspirations, this is not to diminish the importance of the school as a site in which gender identities are constructed.

Indeed this article is intended to focus our attention on the often hidden though powerful processes that differentiate between girls and boys in mixed schools.

Mixed schooling or co-education

An important start is to consider the distinction Brehony (1987, p.4) makes between mixed schooling and co-education. Brehony's (1987) historical account of English mixed schooling bears similarities to our Maltese case. The mixing of boys and girls (as in small village schools) was a matter of what Shaw (1987) has also called administrative convenience rather than a specific policy decision to promote equality between the sexes. In Malta, many smaller rural schools did indeed have mixed infant and primary classes whilst larger urban schools were single-sex. In the move to rigid streaming in the late 1970s, mixing the sexes and amalgamating the primary schools was seen as one way of creating large streamed schools with the better devolution of staff and resources. The issue of sex equality was not on the agenda then, nor has it been at any time since then. Though this has had an impact on the careers of female teachers and headteachers (Darmanin,1991) again there has been no public discussion of the effect of this policy.

This special issue of the journal **Education** is intended to redress some of the gaps of our knowledge on gender issues in education. We have unquestioningly accepted our mixed primary schooling without stopping to consider the implications of this system for the construction of gender identities and the propagation of sexual inequality in our classrooms.

We do need gender identities, but which ones?

In following MacDonald's (1981, p.163) call for a theory of identity formation, researchers have made a useful distinction between sex which tends to refer to the biological aspects of femaleness and maleness, and gender which refers to the psychological, social and cultural elements of personality.

Sharpe (1982) makes the point that most societies do differentiate between the sexes, not forgetting however that the actual construction of the differentiation is in each case not arbitrary but vitally influenced by the economic structure and the division of labour. Moreover, as Sharpe (1972, p. 65) cautions

> the ways in which they do differ are not important and do not warrant their exaggerated consequences in the separation of sex roles and personality.

Recently Davies (1987) has found that apart from having taken-for-granted knowledge about gender that considers male and femaleness as the only mutually exclusive categories relevant to gender, we also have an emotional commitment to the gender we have been assigned. This commitment is developed at a very early age. In

her own research with pre-school children, Davies (1987) notes the difficulties that children have in assigning other than stereotypical roles to characters in the fictional world of two anti-sexist texts. The difficulty arises both from a reading of wider social definitions (France, 1986) in which the polarity between the gender roles of women and men serves as the basic definer of appropriate gender identity

> Maleness in our society is defined in a large part in terms of one's capacity not to behave like a girl and is thus constructed by some boys as something that has to be ongoingly achieved. Females, in contrast are not seen as at risk of becoming males. (Davies, L987, p.45)

and from the children's own identification with the fictional characters on the grounds of sex, i.e.: girls identify with the princess, because she is female.Despite being an untypical female in that she wears a paper bag, triumphs over a dragon and finally rejects a prince, the girls still prefer to identify with her rather than the prince. If, as Davies (1987) and others (Jacklin, 1983; Archer, 1989; Browne and France, 1986) hold, children have already acquired a strong sense of appropriate gender identity by the time they are three, then it seems even more imperative that we recognise that they need 'to find ways of clearly signalling their maleness and their femaleness without limiting or constricting their potential' (Davies, 1987, p. 49).We also need to examine the ways in which the construction of the gender identity has been achieved in order to expose some of the spaces in which intervention can be successful if we are to change and extend what it means to be a woman or a man in our society.

In the nursery and primary school

Whilst acknowledging the parental and societal role in the inculcation of stereotyped gender identities, Marland (1983) turns to the world of the school as one in which girls and boys are made more different than society would otherwise make them. In his words (Marland, 1983, p.2) 'Schools act as amplifiers for society's stereotypes'. Marland (1983) follows Jacklin (1983) in submitting that although parents do construct different identities for their children, they also tend to see them as more similar to each other, regardless of sex, than they do other peoples' children. With experience, some differential attributions disappear and by the time they enter school, Jacklin (1983, p.16) finds that

> in general intelligence, attention span, cognitive abilities and task orientations boys and girls are alike.

According to Marland (1983) the school is from the start a site in which differential opportunities are provided for girls and boys, and in which different capacities will be developed. In an engaging appeal, Marland (1983, p.2) locates some of the consequences of this differentiation.

> The sufferers are boys and girls who have learning opportunities denied them, skills withdrawn from them, possible interests thwarted, their perception of the identity of others warped and, perhaps most important of all, their view of themselves and their potential distorted.

Play

In the nursery and primary school, play is one of the most significant learning activities that pupils of both sexes engage in, yet research has shown that play is constructed differently for pupils by the teacher's definition of appropriateness. Serbin, (1984) was observing a nursery school in New York City when she found that as part of the celebration of Easter the teacher had organised an activity "Here comes Peter Cottontail" for boys and another "In your Easter bonnet" for girls. The boys hopped all round the room, noise and movement were an integral part of the activity, whilst the girls paraded quietly around the room, whilst the teacher encouraged them to "walk nicely". On the basis of this observation, Serbin (1984) observed systematically in fifteen different classrooms of pre-school children and found that firstly, teachers responded differently to children's disruptive behaviour in which boys were given more reprimands but also more attention. Secondly, girls were often ignored, or otherwise the only manner in which girls could gain the teacher's attention was by "hanging around" the teacher, thereby demonstrating the very dependent behaviour that teachers often dislike in girls. More alarmingly, Serbin (1984) finds that this pattern dominated classroom interaction

> more interaction with boys, more praise, and one of our most interesting findings, a difference in the kinds of instruction given to boys and girls. Boys received more detailed step-by-step instruction in how to solve a problem or how to do something for

themselves. Eight times as much instruction was given boys as girls.

Debattista (1987) has found a similar pattern operating in Maltese primary schools. In her ethnographic study, Debattista (1987) makes the following observations that though there is some variation between the three teachers concerned as regards their expectations of individual children, all the teachers operated within a definition in which boys' disruptiveness and **poor academic performance** naughtiness rather than as a product of their attainment and ability, whilst girls were expected to work on their own, present tidy work and behave. They received no positive feedback for this behaviour. For example, Miss Harifa (Debattista, 1987, p.105) expected boys to be disruptive describing one boy thus "He is clever but he is so troublesome". In classroom sessions Miss Harifa actively encouraged the children to compete with each other. Having spent five minutes reprimanding the boys for their inattention, Miss Harifa continues writing on the board.

> Miss H: Who does not pay attention does not get a mark.
>
> Miss: The boys are not paying attention. There is someone naughty, I know although I am not looking. (She has her back turned to the class whilst she writes on the board).
>
> Kevin tried whistling, teacher turns from the blackboard.
>
> Miss H: I'm waiting for you. Charles, be quiet. Christopher, you're not paying attention at all.
>
> Debattista (1987) comments that when a girl behaved in this way she was told
>
> Miss H: Sarah, you were going to be born a boy - you are so naughty.

In her classroom Miss Harifa punished the boys who broke the rules but found that a warning was sufficient for the girls, who as Debattista points out were being socialised into a role in which the teacher's authority is quickly accepted. In this Year III (age 7-8) classroom a number of the boys had already started a deviant career, as Serbin (1984) was to find with the number of boys referred to her for disruptive behaviour in the primary school. Conversely in their attempts to attract the teacher's attention, the girls in Miss Harifa's class exhibited a strong inclination to dependent behaviour, asking for help when they lose rubbers, or crying if they cannot understand the exercise. Weiner (1980), Licht and Dweck (1983) and Sutherland (1983) all consider that learned helplessness and its corresponding anxiety to be one of the main factors in accounting for the discontinuity in girls performance in Maths in the secondary school. Similarly, difficult subjects are less likely to be chosen by girls, who learn that even if they are competent in the primary school, this competence is accidental or due to their neatness and conformity rather than their ability. The hidden curriculum (Serbin, 1983) of school learning seems to be an effective predictor of future choices and school careers.

Thus, we can ask, with Serbin (1984, p.281) what is the effect of boys receiving that much more step-by-step instruction, that much detailed analysis, that much modelling ? One of the answers is given by Serbin (1984, p.281) herself when she notes that in order to gain the teacher's attention, the girls have to resort to proximity seeking. Indeed, where the teacher consciously attended to all the children at the same level, there was an decrease in clinging and girls worked at greater distance from the teacher, explored the room and played with more toys. Another consequence of the gender imbalances in interaction in mixed sex classrooms (French and French, 1984; Spender, 1982) is that as Stanworth, (1986, p.38) in particular, has demonstrated

> both male and female pupils experience the classroom as a place where boys are the focus of activity-particularly in the forms of interaction which are initiated by the teacher-while girls are placed on the margins of classroom life.

For girls this can mean that certain toys and by extension the learning that is associated with them are beyond the space inhabited by girls. They are less likely to get the direct intervention of the teacher is securing the materials they want to use and less opportunity to ask and answer questions.

In a term's observation of a weekly music (singing and instruments) lesson for four to five year olds, I found that the boys predominately occupied the front row of the group and took the first choice of instruments when the lesson moved to the "band" activity. Despite the fact that for ten consecutive weeks it was invariably the boys who pulled out the drums, having been the first to push

their way to the instrument box, the teacher never tried to distribute the instruments in such a way that each child could have an opportunity to experiment with different musical apparata.

This situation can be even more damaging for girls when one looks at the opportunities that girls have in exploring some of the construction toys that are still widely believed to ease the development of the visual-spatial skills necessary for mathematical ability. In their study of girls and mathematics, Walden and Walkerdine (1982) also stress that it is both the experience of action on concrete objects **as well** as teacher expectations and constructions of gender identity that accounts for the discontinuity in girls' mathematical performance. They find that in the two nursery and two primary schools in outer London in which they conducted their action research, it was a lack of opportunity and encouragement which led to a situation in which girls did not play with construction toys. By the age of four children will play with toys considered sex-appropriate by the society in which they live. Nevertheless, Walden and Walkerdine (1982) consider that children of both sexes spent over 70% of their time engaged in construction, creative and fantasy play. It is not necessarily differentiated play time that is perhaps the determinant feature of mathematical ability, but rather the messages and clues that teachers give when preparing children to "discover" mathematical relationships. As with the example of a shopping game that an infant school teacher uses to develop computation skills, the teacher also gives subtle cues about the masculinity and the femininity of the activities in which the mathematical relations are embedded (Walden and Walkerdine, 1982, p.37). Added to this the teacher's own insecurity about mathematics (many of the teachers did not even have "O" level Maths), the teacher's attention to disruptive boys and the amount of time given to bright children, then girls, especially less able girls would seem to be getting a meagre diet of mathematical learning through social relations in the classroom.

Teachers and the construction of gender identities

It will already be apparent from the above that teachers are largely, though often unconsciously (Weiner, 1980; Whyte, 1981; Reay,1990) responsible for the construction of the differentiated identities we find in the mixed classroom. Thus, when Thomas (1986) asked staff to consider the way in which activities were provided and engaged by nursery children, the response of the staff was that they endeavoured "to treat them all the same". Observation and monitoring of play in two classrooms revealed that the pupils were largely occupied in very differentiated and stereotyped play activities despite the staff believing that opportunities were being provided to all children equally.

There has also been consistent evidence that language use in the mixed nursery and primary classroom further reinforces the teacher's construction of separate identities for boys and girls (Browne and France, 1986). Linking the possibilities of understanding through talk with the limited opportunities afforded to girls to interact in the classroom, Spender (1983b, p.103) finds that if in mixed sex classrooms females

> did not have the opportunity to talk the problem over (and males in contrast did have the opportunity), then it could be that females were being deprived of the opportunity to learn, that they were being discriminated against.

Whilst there is some evidence that their passivity and attention might give girls more useful experience in contextual clueing, phonic anticipatory skills (Lee, 1980, p 125) the overall message that girls received along with their increased verbal ability is that reading, as a passive activity is more appropriate for them. Moreover the girls also learn that they are expected to listen and sit still, qualities which are not valued in other curricular areas, such as the guided discovery science of the secondary school (Kelly, 1981, 1987).

Equally damaging to children are the overly sexist comments that teachers make to children regarding their dress (Debattista, 1987; Browne and France, 1985), their behaviour and their play. Browne and France (1985) have identified a series of labels attached to boys and girls that produced constant pressure on boys to be tough "brave" and "strong" (a finding also reported in Askew and Ross (1988) and on girls to gain social approval through being "sweet-natured", "neat and tidy", "busy bee" and so on. Casual comments at to a boy who is called a "cissy" because of pretend playing in women's clothes, not only hurt the boy involved but

> hurts all the girls who may have heard because it states categorically that appearing like a girl is considered wrong by a respected and popular adult. What he must think if you

not only appear like one but actually are a girl!

In using femininity as the antithesis to masculinity (MacDonald, 1981) we are constructing a masculinity in which boys are pressured to hide their vulnerability and to become aggressive. They then find it difficult to talk about themselves thereby restricting their overall personal development (Askew and Ross, 1988). Although Askew and Ross (1988, p.31) find with Clarricoates (1978) Mahoney (1985) and Stanworth (1986) that boys do dominate mixed classrooms in both the primary and secondary school, their increased opportunities to learn are not always leading to a spread of skills and talents. For example, while showing a preference for 'doing', 'making', 'handling' and manipulating', Askew and Ross (1988, p.31) found a real reluctance on the part of boys to undertake other sorts of tasks.

In this sense mixed schooling is not necessarily widening the range of skills of boys and it is clear that unless teachers have been specifically trained to cope with mixed sex classes to reduce difference and promote equality, the intended advantages will not be had.

In the Maltese Primary Classroom

Some cases from my ethnographic research (Darmanin,1989) show how important teacher consciousness is. The 1980 amalgamation of the previously single sex State primary schools had generated a specific response from Miss Vilhena, Year 6A1 teacher in Haddiema Primary School. The boys posed a new and difficult to resolve dilemma for this teacher.

The fieldnotes read thus

Friday 15th January 1992

The teacher remarks that in the two years that she's had boys, she's found that there is a big difference between boys and girls. The boys are untidy and careless, and their handwriting is terrible. She thinks that the girls are more intelligent and conscientious. As an example she quotes last years results of the entrance exam for the Junior Lyceum (11-plus). Out of 28 pupils, 21 passed the exam. Eleven of the 28 were boys and of those eleven only 4 passed. Whilst of 17 girls, all passed.

Whilst it has been established that teachers do hold stereotyped views of the ability of children of different sexes (Stanworth, 1986; Clarricoates, 1978) what seems to be happening here is not simply a "practical consciousness" (Cole, 1984, p.68) but an identification of teachers with their pupils. That the boys are not "her" pupils came out inadvertently whilst we were in Mr Pinto's Year 6D class listening to the religious broadcast on the Redifusion wireless.

Mr Pinto's Redifusion is not working well either.

Miss Vilhena: Wed better go, girls. Shall we go, girls?

Mr Pinto: And the boys too, I hope. You're not leaving them here with me? (Laughter)

1050 am-Back in Miss Vilhena's classroom.

Miss Vilhena: Let's do the religion ourselves (She has lesson notes) Now listen carefully. Either you're going to write neatly on your leaflet because that isn't ours. Or on your religion notebooks. Louis decide. Louis, the holy pictures. You still haven't pasted in yesterdays holy pictures. Susan (has already) stuck them. The boys always two days (behind)...

We would expect that Miss Vilhena's definition of the boys as slower, and her positive identification with the girls would create an environment in which the boys are perforce disadvantaged in her class. Observation showed that this would be a premature conclusion. Because of her definition of the boys' need of extra help and instruction, Miss Vilhena consistently gave more time to the boys, more opportunities to them to answer, and to think about her questions, in short a large proportion of her interactive time on task. Overtly sexist comments on their ability could be seen to damage their self-esteem, yet the very attention that she focused on them compensated in part for this attitude and left the girls in an educational vacuum in her classroom. Her main positive evaluation of the female pupils centred around their ability to present neat and tidy work. Interestingly, Spear's (1989) investigation of science teachers' perceptions of secondary school science and scientists, shows that whilst teachers "recognise" girls' work as being neat and tidy, whilst that of boys as untidy, they attribute this difference in appearance in children's work to

different approaches to work and to different abilities.

According to Spear, (1989, p.274) girls were described as being more conscientious, painstaking, careful, fussy and meticulous. Although untidy, boys' work was evaluated as being more accurate and showing more understanding than the work of girls. Some teacher valuations of the work characteristics of each sex include the idea that boys 'on the whole [seem] to be more able to grasp overall ideas, despite in attention to minute detail'. With Sharpe (1976)and Walkerdine (1989), Spear (1989) finds that neatness might be of questionable educational value for girls. Miss Vilhena's primary school girls were certainly responding to the teachers' expectations of girls' work. Again, Borg and Falzon (1989) have found that Maltese primary school teachers rank *careless, untidy in work* a more serious undesirable behaviour in girls than in boys. No explanation is given of this result but from my experience in ethnographic observation (Darmanin, 1989) it seems that girls are getting a message about the appearance of their work which could contribute to difficulties in the secondary school when ideas rather than neatness are valued positively (Spear, 1989; Kelly, 1987). Relevant here is Walkerdine's (1989,p.268) point that on the 'just or only phenomenon', that is that when girls do perform well, the performance is accounted for by something which amounted to nothing, as 'just luck' for example and is therefore downgraded or dismissed. Walkerdine (1989,p.268) finds that many boys whose performance is poor are said to possess something even when it is not visible in their performance.

The packaging of curriculum material

Another important source for the transmission of stereotyped gender identities in school is in the packaging of curriculum material. Lobban's (1976) work was the first of a series of studies on curriculum packaging. Apart from coding 225 stories in six popular British reading schemes (including the *Ladybird* scheme which is currently in use in Maltese State schools) and pointing to the division of all the stories of activities into two compartments, 'masculine' and feminine', Lobban (1976) also demonstrates the total derogation of female children and adults. The passivity and limited activities of girls, the activity and more engaging occupations of boys and men, are compounded by the view that domestic labour is a completely female activity. Indeed, the only new learning skills that girls are seen to acquire in these schemes are cooking and the care of younger siblings. Similarly, in their preliminary study of some of the set texts in Maltese primary schools, the *Kummissjoni ghall-Avvanz tal-Mara* (1989) have found the same patterns of the derogation of women. Passivity in girls and the superiority of boys are a dominant theme in the five areas under review. They note that *Denfil* (a Maltese language reading book) and *Lejn il-missier* (a religion textbook) are replete with images of traditional sex-roles with women at the centre of domestic and only domestic activity. Men and images of men only, signify the range of occupations that exist in contemporary Malta, including dentist, policeman, grocers, business people, and even teachers. As the Kummissjoni (1989, p. 69) comments this is certainly not the reality that children meet in everyday life. To this remark we can add the observation that in many of the *Denfil* books, there is a near total absence of girls and women from the stories and poems. In Denfil Book 4, for example, out of a total of 59 stories only 7 include a girl as a main character in the story.

Another two stories include a girl as a secondary character. The girls portrayed in these stories are either jealous of friends (It-Tuffieha ta Marija) or love dolls and koala bears, receive sex-stereotyped presents for birthdays and so on. The *Denfil* scheme gets progressively more sexist with the age it is directed at. Thus, Book 6 which is read in Year 6 classroom (the final year, age 11 of primary and therefore of mixed schooling in Malta) has an even more unrealistic ratio of males to females.

Out of 70 stories only 7 include females at all. Not only are children indoctrinated (Spender, 1980) into believing that the male will become a worker whilst the female can only hope to be a housewife (Serbin, 1983) but also all the children get the message that women are invisible or insignificant (Scott, 1980) in the world of learning. It is worth considering with Lobban (1976, p.38) the extent to which children are influenced by their first readers, which are their first introduction to the written word, and as Lobban (1976) stresses, set in the context of authority in the classroom. Serbin (1983) finds that children are sensitive to the sex-typing in story material and preferred to read about characters of their own sex and try out activities modelled by characters of their own sex. In this situation it is even more important to provide the child with positive role models and to reduce the difference in the roles portrayed by adult females and males. Both Serbin (1983) and

Davies (1987) find that since children have already made a positive identification with sex-roles before they start to read and since their attention patterns and learning are related to the congruence of material, changing the material may not be as simple a matter as we would expect. Serbin (1983) in particular, reminds us that material which is incongruent may not be readily absorbed and the active intervention of the teacher must be sought to explain the images produced. However, if we return to the problem of some of the texts used in Maltese schools, such as *il-Gojjin* (a Maltese language and reading book used in the Private schools) we find that a majority of the material is authored and acknowledged as being the work of men, presenting the children with the idea that only men are writers. Such obviously sexist messages can be reduced by including the contribution of female authors in these texts.

Recently, an original member of the commission that compiled the *Denfil* readers for State schools revealed that the commission had the brief to "portray the mother as the basis of the family and to emphasise the soundness of the family with the mother as its anchor" (Mr V Fenech quoted in The Sunday Times, February 18, (1990). The official ideology of patriarchal education is still restricting the portrayal of women and girls in curriculum materials and this official ideology continues to operate as a dominant discourse in the writings of those not bound by the centralization of the Education Department. For example, although the authors of *Il-Gojjin*, the text prepared for Private schools could have avoided the stereotyping of *Denfil* we still find within the *Gojjin* scheme a predominantly stereotyped world. The only work roles for girls presented in the series apart from that of the housewife are those of nun or teacher. Occupations for boys include sculptor, painter, architect, fisherman, priest, soldier, shopkeeper, policeman, pilot, diver, writer, poet, fishmonger, postman and teacher. Moreover, some stories depict boys' aspirations for future work "If I study and obey and pray perhaps I can become a lawyer" (Father's Day, Gojjin Book 6). It is significant to compare the roles portrayed in these stories with the aspirations of adolescents as reported in Darmanin (1991) Browne and France (1986) and Holly (1985) consider that not only are children able to perceive the way in which people are depicted but that also images can be more potent than children's lives. Children whose own parents do not subscribe to stereotyped roles may still internalise the images presented in these texts.

Resistance in the Primary Classroom ?

In the classroom interaction there is some opportunity, as we shall see in the religion lesson produced below, for pupils to resist some of the definitions of the teacher but the printed text remains always the final authority on the subject, and taken together with the teacher's endorsement of it can produce a powerful "collective effect of all the resources on offer in a classroom (Browne and France, 1986, p.126). In the extract from Miss Perellos' religion lesson we can see that the teacher is torn between applying a quasi-supremacist view of girls (for her Year 6B girls contained 17 girls and 10 boys) and their ability, and a stereotypical interpretation of "natural" sex roles as ordained by (a patriarchal?) God.

21st January 1982

T: A lot of you laughed when I said He picked up the knitting needles. Is there anything wrong with a boy doing this? When I was young I used to like riding a bike, and my mother used to say that is for a boy. Do you think it is right for a girl to play football?

Remi: They don't know how to play.

Girls: It's not fair, we know.

T: A girl can learn.

Children: It doesn't suit a woman.

T: Good

Girl: Because girls become mummies, and stay at home.

T: Almighty God makes us like that

Max: Men have more energy.

Boy: Women who work at home get muscles too.

Although many of the children laugh at this comment, there is by no means consensus with Miss Perellos' view that "Almighty God made us like this". Some of the girls are shaking their head in disagreement with her and some of the boys agree with the idea that women get muscles through domestic activity and have energy too. Miss Perellos continues undaunted.

T: For football, you have to be rough. The girls should work at basketball. Certain things are suitable for girls.

Remi: Girls do not learn quickly.

T: No, I don't agree with you. How many Year 6 children are there? Take Year 6A and Year 6B. What are there most of? Girls. Girls.

T: You see Remi, there are more girls, and hadn't I brought you with me, you wouldn't be here [but in a lower stream]. Now you can see the natural inclinations as created by God.

The authoritative voice of the teacher together with the newly, produced sexist religion text Lejn il-Missier are likely to produce even less opportunity for children to resist the gender identities being constructed for them. As the *Kummissjoni ghall-Avvanz tal-Mara* (1989), illustrate for Lejn il-Missier (Towards the Father, a symbolically appropriate title for a patriarchal text) the picture of a boy looking up towards the Father and claiming "I was created by God" is bound to produce a feeling of the chosen male, representative for the human race, in boys and to exclude girls from this special privilege.

Often the teacher consciously directs the children to gender specific texts, in which the stereotypes of the active male and the passive female are propagated. For example on the very first day of the Autumn term and therefore in the initial encounter in the classroom, Mr Valletta talks about the necessity of reading in a pre-11 plus classroom. The need to be good readers seems to be distributed unevenly between the boys and the girls for whilst the boys are told that they have adventure stories, the girls are told that "they have their books", without any specification made by the teacher. The teacher follows his direction of the boys to adventure books and thrillers with further sexist comments.

T: The Lyceum. Seven out of nine boys passed. Girls, I was disappointed. Eight girls from nineteen. And there were a lot of good ones who didn't pass. The year before was a record. Twenty-three girls out of twenty-six. The girls are afraid of Maths. Why are you afraid of Maths? Is it a subject which should scare us? Think carefully. Divide the problem into bits. Even in English. That depends on the reading you do.

Here not only are girls automatically cast into the role of "afraid of Maths" but the reference to the importance of reading takes up the earlier discussion in which the boys were given specific guidance as to which texts to follow and girls were told "the girls have theirs", without the teacher engaging himself enough to locate the source for girls' reading. It is apt to recall that many of the stories that the children do indeed read in their set textbooks, especially in the *Ladybird* scheme are written as adventure stories, possibly to attract the attention and interest of the boys, who as Clarricoates (1978) points out often have curriculum materials specifically designed to prevent them from losing interest and becoming disruptive. Even in the sixth form, Stanworth (1981) finds that textbooks are written with apparently a male readership in mind.

Taken Together

Taken together practices in mixed primary classrooms work in such a way as to actively construct differentiated learning and social experiences for girls and boys. In this situation any ambitions for changing stereotyped gender roles are unlikely to be achieved. Certainly mixing itself has many unintended consequences. In considering the complex classroom processes that construct differentiation in primary school, this article has sought to challenge some of the commonsense assumptions surrounding mixed schooling.

An important next step would now be to consider practical solutions to the problems identified. Single-sex schooling is but one of them. Despite the evidence that girls are better off in this system, it is not argued here that we should cause an upheaval in our mixed primary schools on these grounds alone, though it would appear (Darmanin, 1991) that there are many advantages to be had in keeping our single-sex secondary system. Rather, a policy needs to be developed that will be useful to all our primary and secondary schools. This policy should not be directed at merely changing the nature of pupil grouping, but more specifically address the issue of what it is that children can receive at school.There is not the place here to consider possible proposals in detail, and these should of course include a plan for helping boys out of masculine stereotypes. But perhaps Reay's (1990,p.38) poignant and applicable appeal for a change in girls' education is one way of starting a new era.

What girls do need, and rarely get, is the opportunity to become more independent, confident and intrepid, to receive support around curriculum areas where they lack assurance, to take risks and to begin to develop a view of themselves as autonomous learners, while simultaneously having their feminine qualities of co-operation, empathy, quietness and the ability to listen validated.

Notes

All names are pseudonyms. The ethnographic transcripts have been transliterated from the original Maltese.

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Everyday Life in Today's Schools: the Female Pupils' Experiences.

Sara Delamont

Introduction

On November 1st 1991 *The Times Educational Supplement* published a letter from a school governor querying the activities of the headmistress of a primary school. Among the problems was:

> Finally, we had put in our behaviour guidelines that no punishment should be embarrassing to the child. Now we've heard that she's made girls wear boys' caps if they're caught fighting.

If this disciplinary strategy has been accurately reported, the gender stereotyping is marked. Not only does the school have uniform, with different headgear for boys and girls, but fighting is seen as a 'male' pastime, and discipline is partially based on shaming one sex by comparing them to the other. Managing boys by comparing them unfavourably with girls, or *vice versa*, were common control strategies in British middle and comprehensive schools in the late 1970s (see Delamont, 1990, p. 29 and p.59) and in lessons for slow learners in some Welsh comprehensives in the mid 1980s (Delamont, 1990 p.60) but to hear of them thriving in 1991 is a shock. This paper examines what is known about everyday life in British schools as it is experienced by female pupils, drawing on the research done in the last twenty-five years. There are five sections, on the research background, on teacher-pupil relationships, on same sex pupil relationships, on male-female pupil relationships, on myths and fantasies, and on an agenda for future research.

The Research Base

Research on everyday life inside schools and classrooms is a relatively new branch of educational research. In Britain the pioneers were Hargreaves (1967), Lacey (1970) and Lambert (1977 and 1982). In the USA, educational anthropologists were first to study classroom processes, both inside the USA Canada (e.g. Wolcott, 1971) and abroad (Spindler, 1974). Gender was not a focus of the early work. In the USA anthropologists were interested in describing minority cultures that came into conflict with dominant values inside schools, while in the UK researchers focused on social class and school achievement (see Atkinson and Delamont, 1980, 1990 for details).

Various methods have been used to study school and classroom processes: questionnaires, interviews, observation by non-participants and participants (working as teachers or role-playing pupils), audio-visual recording, and the collection of documents such as pupils' diaries, essays or life-histories.

The rise of the contemporary feminist movement produced educational researchers who wanted to examine sex differences in school outcomes (such as exam results), to explore how female pupils experienced schooling, and to try and change both the experiences and the outcomes. The work on school experiences has not been extensive but there are British and American studies of girls in nursery (Lloyd, 1989; Paley, 1984), infant (King, 1987; Serbin, 1978), primary (Clarricoates, 1987; Best 1983), secondary (Measor, 1989; Grant and Sleeter, 1986), and further education classes (Cockburn, 1987; Valli, 1986), as well as a much greater sensitivity to gender issues in school process studies generally. However there are still many gaps in our knowledge; many aspects of the schooling of girls we know little or nothing about. Before reviewing what is known in the rest of this paper, these gaps in the research need documenting.

The British research is, first, lacking in coverage of Northern Ireland. There is no monograph on the school experiences of young women in Northern Ireland either in Catholic or Protestant institutions. As Northern Ireland has many single sex schools *and* maintains academic selection at 11, comparisons could be drawn between Northern Ireland and other regions of the UK if research on women were carried out. The lack of data on gender and schooling in Northern Ireland is not the only gap in the regional coverage of our knowledge of the issues. Wales has not yet had much research carried out on gender and education. There is a brief overview of the statistics in Jones (1988) but no process studies have been

published. In particular, the lack of research on girls' experiences in the fast-growing Welsh-medium sector is unfortunate. There is an evaluation of one innovation aimed at broadening young women's experiences: the Women's Training Roadshow programme (Pilcher *et* al., 1989), but little else.

Scotland has yet to produce the range of school process studies focused on women that its unique education system deserves. The impact of moving to secondary education at 12 rather than 11 on girls, and the comparative success of Scottish comprehensives at reaching working-class teenage girls and harnessing their educational potential (McPherson and Willms, 1987) both deserve Scottish-based process studies.

Most of the British research on girls' and young women's schooling has actually been done in England, especially urban England. Like most of the British ethnographic research it has concentrated on pupils in state schools.

There is a shortage of work on girls' experiences in denominational schools (especially fee-paying ones), and in elite 'public' schools. The young women I studied at 'St. Luke's' are now 36, and mine is still the only published research on the processes of schooling in the high prestige, high cost and explicitly *feminist* independent sector (Delamont, 1989). Because of the sexist biases in the sociology of education in the 1960s and 1970s (see Acker, 1981) there are gaps in the historical record of girls' schooling in Britain. The only data on young women in single sex grammar schools were collected by Lambert (1977, 1982) and Llewellyn (1980) and are mostly unpublished. There are no data on young girls' experiences of the 11+ or 12+ exams, or of streamed primary schooling; none on young women in the few Technical High Schools established after the 1944 Act, and none on life in secondary modern schools before CSE and the raising of the school leaving age to 16. All these experiences are now past and therefore lost, and sociologists failed to collect data on them when they existed. There has also been a pattern of research on male adolescents being published in monographs, while equivalent data on young women has been only available in journal articles or research reports, which have lesser impact (see Delamont, 1989, Appendix 1). Hargreaves (1967), and Lacey (1970) are frequently described as pioneers of school ethnography, while Lambert (1977, 1982), their contemporary, is ignored, because her study of the girls in 'Lumley' and 'Hightown' was never a monograph.

There is also a shortage of research which compares the lives of females in mixed and single sex schools or classes of otherwise similar types, which means we are often unable to determine whether findings are due to the dynamics of schooling *or* the presence of males and females in the same rooms.

The arguments advanced by Hammersley (1990) could only be addressed by such comparative research. Race and ethnicity are also topics where the data on gender are still too few in number. There are a few studies of British West Indian and South Asian women in education, but not enough, and some other ethnic groups (e.g. Greek and Turkish) have not yet been the focus of published research. The school experience of a female pupil of Chinese origin are unlikely to be 'the same' as the British West Indians studied by Furlong (1976), Fuller (1980) and Mac an Ghaill (1988). No one could suggest our data on the latter were adequate, but we do have a few studies of British West Indian women in school, whereas we have nothing on the Chinese.

Bearing these limitations in mind, the paper now considers what is known about the school experiences of girls in contemporary Britain, in the next three sections on teacher-pupil, same-sex pupil, and opposite-sex pupil relationships. Because most of the studies conducted in the last fifteen years have been done in mixed schools, the findings reported here are from mixed schools. The feminist calls for the reintroduction of single-sex schooling (see Deem, 1985) have not yet produced a body of research on interaction *in* girls-only schools.

Teacher-Pupil Relationships

Female pupils in Britain are likely to be taught by women most of their classtime before the age of 11 or 12, and by women and men thereafter. The head of their school, however, is likely to be a man, and so are senior teachers such as deputy heads. Whether their teachers are men or women, however, the female pupil is likely to be viewed as *naturally* more compliant, more nurturing, more verbal, and more dependent than male pupils. Most teachers hold stereotyped, determinist views of sex differences, believing males and females to be biologically distinct: and the effects of such beliefs are conservative. Teachers who believe boys who are biologically

programmed to be more talented at maths and science are unlikely to spend time and trouble on developing scientific and mathematical prowess in girl pupils (see Delamont, 1990 pp. 25-26 and 75-78). Believing phenomena to be natural has doubly conservative effects: not only are believers unlikely to try to change the phenomena, they also fear that attempts to tamper with the *status quo* will be damaging to individuals and the social fabric.

When pupils hold stereotyped views about male and female behaviour, then the school teachers' reinforcement of them makes classrooms uncomfortable places for the pupil who diverges from the stereotype. Wolpe (1977) and Abraham (1989a and 1989b) have both reported teachers' repulsion when faced with boys they saw as 'effeminate', (see also Mac an Ghaill, 1991) and Hargreaves, Hestor and Mellor (1975) and Llewellyn (1980) report similar distaste for girls who behaved like boys.

Ironically, some studies have shown teachers reinforcing the behaviours in girls that they dislike. Serbin's (1978) research showed nursery school teachers objecting to girls 'clinging' and keeping close to them. Yet, when observed, it became clear that girls could only get teacher attention and responses when physically close; unlike boys who received teacher attention wherever they were in the nursery, girls beyond touching distance were ignored. Lloyd's (1989) observations in the South East of England in reception classes at two schools show teachers similarly trapped, as do Hilton's (1991) data on playgroup workers. These latter two studies found no evidence that Serbin's conclusions had reached teachers of young children.

Other studies of teachers (see Delamont, 1990), and of recruits to the occupation (e.g. Sikes, 1991) reveal an occupational group unaware of feminist perspectives, ideas of gender as socially constructed, and unconscious of the school's role in reinforcing conservative messages about sex roles.

The only British study which runs against the trend is Smithers and Zientek (1991) who surveyed 218 infant teachers and 84% said that they tried to encourage both sexes to try activities traditionally associated with the other sex. The introduction of the National Curriculum was also thought to have potential for lessening gender stereotyping by 63% of the respondents.

There has not been very much research into sex differences in teacher-pupil interaction, and the interest in the topic has not led to large-scale projects such as ORACLE (Galton, Simon and Croll, 1980) or the American Beginning Teacher Study (Denham and Lieberman, 1980). some of the best known and most frequently cited studies have been based on very small numbers of teachers and tiny amounts of classroom interaction (see Delamont, 1989, pp. 270-272). Hammersley (1990) has challenged the conclusions of two previous sets of researchers both philosophically and in terms of the small size of the data bases used to draw conclusions that there are unjustified gender imbalances in talk in primary classrooms. The available data on primary classrooms in Britain has been reviewed by Croll and Moses (1990), who conclude that 'there is a consistent tendency for girls, on average, to receive slightly less individual teacher attention than boys' (p. 197). This is largely, but not entirely, because boys are reprimanded more than girls. Croll and Moses are able to come to this conclusion in part because there have been a series of large scale observational studies of primary classroom in Britain. The data on secondary classroom are sparser and do not allow for such generalisations to be made. Claims have been made that boys take two-thirds of the dialogue in secondary classroom, but that data are not robust.

It is easy to blame teachers for the conservative and conformist sex roles routinely reported from schools. However teachers who wish to challenge conventional male and female behaviour, dress or speech patterns can find themselves pilloried by colleagues, *and* facing resistance from pupils, who can be upset and angered by such challenges. Pupils' adherence to stereotyped sex roles is one striking finding of the research on pupils and sex roles which needs reiteration here. Study after study has shown that there is a triple standard in operation as far as children's and adolescents' sex stereotyping is concerned. Children and teenagers are relatively relaxed about their own gender-related behaviours, relatively stereotyped about their same sex peers, and highly rigid about opposite sex peers. Thus Tom believes it is fine for him to learn ballet, dubious for Phillip to want to be a nurse, and outrageous for Mandy to aim for veterinary medicine. Mandy feels confident that she can be a vet, doubts whether Pauline should strip down motorbikes as a hobby, and is *sure* Philip should not be a nurse and Tom should not learn ballet.

Such beliefs were reported by many of the respondents to the Smithers and Zientek (1991) survey. As one teacher reported:

> (Boys) never turn round and say that boys can't do cookery when we have cookery activities but they turn round and says that girls can't play with the Lego with them, or girls can't play with cars (p12)

The conservative perspective on sex roles held by pre-adolescent pupils shows up in the research on scarey stories told before transfer to secondary school (Measor and Woods, 1984; Delamont 1991), and in pupils' response to teachers who try to be different (see, for example, Beynon, 1987). Guttentag and Bray (1976) discovered that teachers who tried to challenge pupils' stereotypes *could* actually accentuate and reinforce them. A wholehearted and well-conducted intervention could change pupils' ideas, but a half-hearted or badly constructed intervention had the effect of exaggerating pupils' stereotypes. Many of the projects designed to widen pupils' horizons about the labour market, or change their ideas on sex roles, have run up against such ingrained prejudices (see Delamont, 1990, chapter 5 passim).

For the female pupil, relationships with teachers are important, but equally central to school life are peers.

Same Sex Pupil Relationships

Young women at school place a high value on their same sex friends. In *Jackie* for May 25th 1991 the problem page carried eleven problems, four of which concerned relationships with female friends. One girl complains her friend is nice when they are alone but horrid when others are present; one fears her long standing relationship with her best friend is breaking down; a third has one friend who is unpopular with her other 'mates'; the fourth suffers because her friends think she is too well behaved in her school where her father is head of year. The co-ordinators of the problem pages in all the teenage magazines report a similar bias in the letters they receive: relationships with same sex peers matter a great deal to young women. Nilan (1991) has discussed the moral order of two cliques, one in a middle class Sydney school, one in a more working class rural Catholic school in New South Wales. In both contexts, survival in a friendship group depended on 'fairness', 'honesty' and on 'obligation to show caring', and in both settings, the maintenance of the friendships was extremely significant to the young women. For twenty years researchers have been chronicling the peer group structures of schoolgirls in mixed and single sex institutions. Lambert (1977), Meyenn (1980), Llewellyn (1980) and Delamont (1989) all found girls' peer groups in schools during the 1960s and 1970s which functioned as important parts of their members' lives and mediated school experience through group attitudes. Meyenn (1980) found that the twelve and thirteen year old girls in an English middle school did have groups of friends rather than one best friend, and their groups were important to them. One girl, Diane, is quoted as saying 'if we had to say somebody was our best friend you wouldn't say one person. It would be all this lot'. Meyenn found that the sixteen girls were in four groups, which he called 'P.E.', 'nice', 'quiet', and 'science lab'. The quiet girls saw themselves as 'dunces' and were in bottom groups for lessons. Yet they were not anti-school, but accepted their low status and co-operated to have fun. The 'nice' girls were apparently concerned to go through school unnoticed, neither excelling nor failing. The two more visible groups were the 'P.E.' and 'science lab' girls. Both these groups wore fashionable clothes and make up, but differed in the relationship to the school. The P.E. girls were noisy and aggressive, and helped each other with schoolwork. The science lab girls were regarded by the teachers as mature and had internalized the idea that schoolwork was competitive and individual. Their 'maturity' meant they were allotted the task of caring for the animals in the science lab and recognised the value of their privilege. The science lab and P.E. girls did not get on very well together, for as Diane (a science lab girl) says, 'When we get good marks they all say "teacher's pet" and things like that', while a P.E. girl, Betty, told Meyenn about the science lab group, 'They're always trying to get round the teachers and everything. They're always teachers' pets, them four'. Meyenn's data are very similar to mine on upper middle class fourteen year olds collected in Scotland (Delamont 1984a, 1989). At St Luke's there were similar distinctions between girls who had adopted fashion and makeup and those who had not, and between those who accepted the school's ideas about intellectual effort against those who saw schoolwork as a task to be completed by fair means or foul (e.g. copying).

The interaction between the girls in any particular friendship group can be important for the academic involvement and achievement of all of the members. Solomon (1991) is the latest in a series of observers to follow a group of 11 and 12

year old girls through their first months of science. One clique, Karen, Sheila, Mary and Anna, begins science with Karen very keen on the subject. Within two months the whole quartet have decided that they cannot 'do' science, their experiments do not work, and they are directing all their effort towards writing beautifully neat accounts of other children's successful experiments rather than trying to do their own practical. There are not enough studies of how peer group membership can influence school performance yet, but those we do have routinely show girls valuing unanimity and consensus in their group over controversy and innovation. Boys' groups are less concerned to reach consensus and argue more enthusiastically. Because even in mixed schools, co-educational friendship or working groups are rare, pupils get little school experience of cooperating with those of the other sex.

Male-Female Pupil Relationships

In mixed schools, although boys and girls are taught in the same rooms and spend their leisure time in the same playgrounds, the evidence is that males and females avoid each other. Pupils do not sit together or work together, unless a teacher forces them to do so (Delamont, 1990, pp. 38-40). The features of pupil culture which produce this avoidance have been most sympathetically described by Raphaela Best (1983). She followed a cohort of pupils through childhood and into adolescence, learning about their culture and simultaneously confronting them with the illogicalities in their sex role stereotypes. Her central argument is that schools teach children three curricula, one overt, two hidden. The academic curriculum and the official school rules are manifest, but behind them, and largely invisible to adults were the rules of appropriate male and female behaviour learnt from peers and enforced by them. Concealed behind that first 'hidden' curriculum was a third, even more secret children's, culture, where sexuality and obscenity were crucial. The third area was the most carefully hidden from adults.

As Bauman explains:

> The free peer group activity of children is by its very nature a privileged realm in which adults are alien intruders, especially so insofar as much of the children's folklore repertoire violates what children understand to be adult standards of decorum.
> (Bauman, 1982 p. 178)

Fine (1987, pp.238-40) reports the complex process of getting pre-adolescent boys to trust him with the vulgar-obscene aspects of their culture, as does Canaan (1986), and Measor (1989). This deeply concealed pupil culture is revealed in the scarey stories told about school transfer (Measor and Woods, 1984; Delamont, 1991), and researchers can gradually gain access to it, if, like Best, they reveal themselves to be unshakeable and trustworthy. Such things as sexual harassment (Mahoney, 1985; Herbert, 1989), attacks on cissies as 'poofters', and accusations about young women being sexually immoral flourish in this arena.

In adolescence the sexual double standard becomes an important element in male-female relationships. Paul Willis (1977, pp. 43-46) stresses how sexist the beliefs about women held by the 'lads' he studies in Hammertown. They operated a double standard between the steady girlfriend (virtuous and sexually faithful) and the 'easy lay' (cheap and promiscuous). One of his informants claimed that 'once they've had it, they want it all the time, no matter who it's with' so that the 'easy lay' is damned by the whole group. Willis suggests the girls have no scope to be assertive or sexual, and are forced into romantic silliness. This double standard was clearly recognised by the girls studied by Deirdre Wilson (1978), Lesley Smith (1978) and Sue Lees (1986). Wilson's sample of young women between thirteen and fifteen in northern England divided girls into virgins, 'nice' girls who had sex when in love with a steady, responsible boy, and 'lays' because association with a bad girl could tarnish their own reputation. Lesley Smith's sample of fourteen to sixteen year old in Bristol held similar views, even when they doubted the justice of them. For example:

> Liz: Look I don't believe there should be one standard for a boy and another for a girl. But there just is round here and there's not much you can do about it. A chap's going to look for someone who hasn't had it off with every bloke. So as soon as you let him put a leg over you, you've got a bad name.

Similarly, Sue Lees was told a decade later:

> When there are boys talking and you've been out with more than two you're known as the crisps that they're passing around.... The boy's alright but the girl's a bit of scum.
> (Lees, 1986, p.40)

Girls have to avoid being 'slags' themselves, and they must not associate with other girls who have bad reputations. Lees was told

> If someone for whatever reason has got a bad name...can't go with that girl. Because you get called the same name and if you're hanging around with a slag you must be one. (Lees, 1986, p.49)

Adolescent girls are careful to maintain their reputation as 'nice' girls and avoid being labelled 'slags' and 'sluts'. The latter can be spotted by a variety of signs, but one of them, in the boys' eyes is a girl's knowledge and use of contraception. In mixed schools girls spend considerable time and energy avoiding behaving either as too clever and hard working or as a slut. There is not much space between the two negative roles.

Research Priorities

Despite the research done in the last twenty years there are many areas of female pupils' school experience which are not yet properly investigated. Apart from the lack of studies in Northern Ireland, and in Wales, some research on young women in rural areas of England is needed. The school experiences of females in fee-paying schools, both single sex and co-educational, need studying. The percentage of 16 year old women opting to stay into the sixth form has risen over the last decade without any research on why these 16 year olds are staying on rather than leaving as their predecessors did. Many of the initiatives designed to change women's experiences of education, such as Women Into Science and Engineering courses have not been evaluated by researchers (see Delamont, 1990, pp. 114-115).

Most serious, however, is the lack of a large, reliable database on classroom interaction patterns from 4 to 18 in all subjects, which compares females' experiences of classroom interaction in mixed and single sex classes. It is a matter of urgency to discover whether girls are routinely receiving less teacher attention, and/or teacher attention of different kinds from boys, and how their learning experiences are different when only girls are in the room. Only when we have this large body of data can we really claim to know what the female pupils' experiences of schooling are.

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Maltese Girls' Attitudes to Physics

Lilian Said

Why Physics?

It has been argued by Kelly (1987) and others (Harding, 1979: Klainin and Fensham, 1987) that science is a male domain. A masculine image is attributed to physics. In fact polarization of subjects exists where the three sciences (physics, chemistry and biology) are optional. Girls tend to choose biology while few opt for physics. Boys prefer physics to biology and there is evidence that this applies in the Maltese situation as well as elsewhere (Darmanin, 1991; Ventura, 1991). Chemistry seems not to carry differential gender images (Johnson and Murphy, 1986: Johnson and Bell, 1987).

The polarization of subjects is of great concern to those who seek to make education equally accessible to everyone. If girls avoid studying physics they would be putting themselves in a disadvantageous position. They would be limiting themselves in scientific careers and career opportunities.

> Physics is a crucial qualification without which women are barred from many careers... Being scientifically illiterate in a highly technological society can only lead to a feeling of inadequacy.
>
> Duxbury, 1984,p.649

In Malta physics is now compulsory for entry to the State sixth form and so both girls and boys learn the subject. However attitudes towards the subject vary considerably (Ventura,1991).It is the aim of this small - scale study to identify the attitude that Maltese girls have towards physics.

Method of Investigation

To fully understand girls' attitudes to physics in their own words and with their own definitions, an Interview was held with ten (10) fourth form girls in one Junior Lyceum (grammar school). Although all from the same class, the girls were chosen at random. Pseudonyms have been used throughout. A set of ten questions (see below) had been prepared beforehand, and these were based on the items relating to subject orientation identified by Kelly (1987).The interviews were therefore structured. The pupils could answer in either English or Maltese according to their preference.

General attitudes towards physics

The first two questions of the interview 'What do you think physics is about?' and "Do you like physics ?' were designed to elicit general comments regarding the girls' understanding of the subject and their attitudes towards it. Half of the girls (5) considered physics as related to things that happen around us. Physics involves going into detail about things, carrying out experiments and studying formulae by heart (memory) according to two thirds of these girls.

> Brenda: Fil-physics nidħlu f'dettalji irqaq ta' affarijiet li niltaqgħu magħhom fil-ħajja ta' kuljum.

> Helga: Għalija il-physics huwa suġġett fejn wieħed jkun jista' jesperimenta t-teorija. Fiħ ċerti formuli li teħtieġ titgħallimhom bl-amment.

One girl sees physics as an integral part of our technological age.

> Ethel: Il-physics huwa suġġet li jitratta fuq it-teknoloġija. Naħseb li hu tajjeb fil-ħajja tal-lum, iktar u iktar il-quddiem, meta id-dinja tagħna qegħda dejjem tiżvillupa.

Two girls considered physics as a subject related to machinery and engineering. One commented that physics is 'boring' and 'confusing' while another girl said that it is difficult. Although most of the girls considered physics to be related to everyday happenings, they did not seem to note any connection between physics and human experience. This tallies with Weinreich-Haste's (1981 cited in Kelly, 1987, p 127) finding that

> science was associated with factors such as difficulty, hard rather than soft, things rather than people and thinking rather than feeling, all of which are part of the cultural stereotype of masculinity.

Asked whether they like physics and if so, why ? half (5) the girls answered that they did like the subject whilst four (4) said they do not like it.

Catherine took a neutral position. Her answer is typical of the ambivalence many girls feel towards the subject. She likes it both when it involves mathematics and when it is based on experiments, but she qualifies the liking by referring to difficulty and learning problems.

> Catherine: Jiddependi, xi kultant jogħġobni, xi kultant le. Jogħġobni l-aktar meta nagħmlu l-esperimenti, u meta ikun fih ħafna maths, dan is-suġġett huwa l-favurit tiegħi...iva, l-maths jiġifieri. Minn naħa l-oħra iddejjaqni l-physics, meta isir tqil ħafna, nibda nitħawwad u niddejjaq fil-lezzjoni.

Helga's answer is typical of those who did like physics

> Helga: Jien inħobbu għax fih nitgħallmu ħafna affarijiet li fil-ħajja ta' kuljum nistgħu niltqgħu magħhom.

Those like Ina, who disliked the subject linked it to difficulty in understanding

> Ina: Ma tantx, għax għalija huwa suġġett tqil u 'boring' u diffiċli biex tifhmu.

The girls' attitudes towards a subject are important because they are 'both a determinant and a consequence of learning' (White, 1988, p.100). Positive attitudes generate willingness to learn, while negative attitudes destroy it. It is quite encouraging that half of the girls interviewed like physics though it is equally of concern that the other half did not, especially since many of the comments suggest that with different methods and materials there could be a change in attitudes.

Physics-a compulsory subject?

Since most of the research on girls' attitudes to physics comes from Britain (Kelly, 1982) and Australia (Parker, 1984) where physics is an optional subject it is difficult to compare the findings with the Maltese situation, where for girls aspiring to State Sixth Form, it is a compulsory entry requirement. Whether a subject should be compulsory or not is debatable. Harding et al (1988, p.189) argue that

> The inclusion of choice is seen to be a liberalizing move which caters for a wide range of interests and encourages the development of decision-making skills. On the other hand, whenever choice is offered stereotyped assumptions may operate, restricting real freedom to choose.

Since physics has become compulsory in Maltese schools both Darmanin (1991) and Ventura(1991) have found that uptake has increased considerably and that girls are entering more science related courses, especially in the medical sciences (with 50% female medical students). However engineering remains undersubscribed (Darmanin,1991) and attitudes towards the subject have not yet changed significantly (Ventura, 1991).

With question 10, 'If physics were no longer a compulsory subject, would you then take it as one of your options?' I wanted to explore the issue further. The majority (7 out of 10 girls) answered that they would not have chosen it, with five (5) of the seven giving the reason that physics was unrelated to their future job choice. Johnson and Bell (1987, p.273) have also found that

> Interest in a subject and perceived usefulness for jobs were both the most frequently selected reasons for the pupils' subject choices.

Despite liking the subject, many of the girls would have been glad to drop physics.

The relevance of physics

Question 3 (a) was directed at eliciting exactly how relevant the subject was considered in terms of future jobs and careers.It was found that six (6) girls thought it was related to their future career whilst four (4) did not.

> Doreen: Iva, għax naħseb li se jkolli bżonnu biex nsir tabiba.

> Ethel: Għall-'job' li nixtieq ikolli 'l quddiem, il-physics huwa bżonnjuż ħafna. Inkella mingħajru ma nistax inwettaq ix-xewqa tiegħi. Jien nixtieq nsir 'sailor' u l-physics allura għandi bżonnu. Jekk imbagħad ma nsirx 'sailor', naħseb li xorta waħda għandi bżonnu għal jobs oħra. Barra minn hekk billi fl-iskola jkollna nitgħallmuh bilfors irridu jew ma rridux, jien naħseb li hemm raġuni għalfejn, u din hija li 'l quddiem ser ikollna bżonnu.

In all, the girls showed an acute awareness of occupational entry requirements and even of labour market processes as Darmanin (1992) has

found with larger samples. Amongst those who felt it was not relevant were answers such as Ina's (below) which show a single minded movement towards a career in teaching of specific subjects (though not physics). Other answers such as Joyce's also show a instrumentalist approach to the subject. Joyce wants to be a nurse, a profession in which in the broader understanding of it would benefit from a strong science background. Joyce doubts that physics is indeed useful and goes on to add that it is not an entry requirement for the course.

Ina:Le għax għall-għalliema ta' l-istorja ta' Malta jew xi suġġett ieħor bħall-lingwi, ma jidħolx physics.

Joyce: Le, ma naħsibx li jkolli bżonnu fix-xogħol tiegħi ta' nurse u lanqas ma naħseb li għandi bżonnu biex nidħol fil-kors.

Question 3b asked whether the girls thought they needed physics to help them understand and control the world around them. Here again the majority (6) did think physics was useful in this regard whilst the remaining four did not. Some, like Catherine, qualified their answer by referring to the theoretical relevance of physics but doubting its practical applicability.

Catherine:Jiddependi...bħal issa qed jiġini ġo moħħi l-eletriku fid-dar. Hawn żgur li jidħol l-physics. Iżda l-physics mhux dejjem tista' tassoċjah mal-ħajja tagħna ta' kuljum.

Others like Doreen gave a wider interpretation to the relevance that could be derived from the subject and her answer indicates that if teachers need to find ways of 'marketing' the subject they might do well to consider these commonsense constructions of relevance.

Doreen: Iva, għaliex jekk jinqala ' xi ħaġa fid-dar tkun taf timmaniġja. Anke, ngħidu aħna, la tkun taf dwar il-'greenhouse effect' tkun tista tieħu passi biex tgħin l-ambjent.

Physics as a male domain

Kelly's (1987,p.127) dictum that 'science is masculine' is well-known. In order to find out how these Maltese girls felt about this two questions were put to them in this regard. Question 5 asked if they thought that boys achieved better in physics than girls did. Half thought that boys did do better whilst the other half were divided in their response.Of those who thought boys did have more success the answer was often explained in terms of the boys' opportunities to practice the subject in their everyday life.

Ethel:Il-ġuvintur jifhmuh iktar għax fil-ħajja ta' kuljum huma jipprattikawh iktar mit-tfajliet.

Two of the girls did not agree that boys did better whilst another two conceded that boys sometimes did better but this was because they needed it for their careers.Interestingly, among the two who thought that girls did achieve as well as the boys was Angela who had herself had difficulties with the subject and disliked it. It would be misleading with this sample to claim that the single -sex setting of Maltese secondary schools might in part produce a less stereotyped attitude to the ability of girls than mixed schools, but it is noticeable that some difference in attitude between these girls and other reported studies (Kelly,1987) do exist. For example, Brenda agrees that often it is boys who do achieve in physics but she also makes it clear that firstly she is not sure why this is so, and that one reason may be that the boys have more opportunities for practice. Secondly she reminds us that girls are intelligent too and could achieve well. Without actually saying it Brenda implies that take-up of the subject might be the real problem for girls.

Brenda: Iva, naħseb li jmorru (is-subien) aħjar fil-physics bħala suġġett, għalkemm hemm ukoll ħafna tfajliet li huma intelliġenti u li jifhmu l-physics. Iżda xorta jibqa' l-fatt li l-maġġoranza ta' dawk li jifhmu l-physics huma ġuvintur... Eżattament għalfejn ma nafx, forsi huma (is-subien) jippratikawh iktar fil-ħajja tagħhom ta' kuljum.

Ethel also links the difference in achievement to different lived experiences and specifically mentions Malta as a country in which boys and girls are given different jobs to do and therefore different learning situations. Finally, Felicity demonstrates the type of protection that is afforded by the single-sex system. She answers that she cannot give an answer because she has never discussed physics with boys, the implication being that she does not consider their performance and attitudes as relevant to her own experiences.

Indeed when it came to answering question 7 which asked whether the girls thought that physics was a boys' subject, most of the girls (7) disagreed with this suggestion. Angela answers quite dogmatically

> Angela: Le, għax kulħadd kemm bniet, kemm subien jistgħu jagħmlu karriera bil-physics.

Brenda is equally clear about her objections to the insinuation that physics is a boys' subject. For her, women's participation in waged labour means that they should have the same educational opportunities. The same position was shared by Doreen who spoke also of equal rights and by Ethel who stressed that girls could and should be able to have the same jobs as boys. Ethel feels that girls should be able to choose any field in the labour market.

> Brenda: Le, jiena ma naqbilx li il-physics huwa aktar suġġett tas-subien. Illum il-ġurnata ix-xogħolijiet tal-ġuvintur huma bħal tat-tfajliet u allura jekk f'ċertu xogħol hemm bżonn il-physics, anki 'l-bniet għandhom bżonn jitgħalmuh biex ikunu jistgħu jagħmlu dak ix-xogħol.

Though she felt that physics was not a boys' subject, Ina was not confident that girls and women would with take-up be able to enter the same jobs as men. She gives engineering as an example. The students who thought that it was a boys' subject qualified their answer by referring to the fact that boys take up the subject more than girls. None of them gave ability as an explanatory variable.

Self Image

Much of the work on girls and physics has explored the idea of self-image. Kelly (1987) gives the story of Jean to make her point. Duxbury (1984, p.652) points out that

> The self-image of girls is poor. Girls tend to attribute success more to luck than to judgement.

In the interviews a series of questions were asked to try to understand the girls' personal self -image, especially in relation to their achievement in physics. Three girls said they did badly in physics because they never liked the subject. A typical answer was Angela's who started off by locating the problem in poor teaching but then went on to say that possibly she was not studying enough. Later this was explained as a consequence of difficulty, in that she had become disheartened (in the Maltese 'I lost heart') and gave up trying to understand

> Angela: Le, ma tantx għax xi kultant ma nifhem assolutament xejn. Jista' jkun li jaffettwa l-fatt li min jagħllmek ma tantx ikun tajjeb għalhekk ma tagħtix każ. Jista' jkun ukoll minn naħa tiegħek għax ma tistudjax. Jista' jkun ukoll li is-suġġett tarah tqil, taqta' qalbek u ma tikkoperax biex tifhem aktar, kif qed jiġri lili.

Six of the ten girls interviewed said that their performance varied. They had to study hard to do well. They found that teaching methods also affected their performance.Physics, like mathematics (Fennema,1983) is seen to affect self-esteem and cause anxiety because even those girls like Brenda (below) who do very well in all other subjects find difficulty with physics.

> Brenda: Ma tantx immur tajjeb, għalkemm ġieli nistudja. Naħseb li l-iktar li jitfawni lura huma dawk il-'problems' twal li dejjem kważi iħawduni. Fis-suġġetti l-oħra kważi dejjem immur tajjeb, minbarra l-physics, u għalhekk naħseb li din hi xi ħaġa ġejja minni. Infatti mill-bidu għidt li l-physics mhux se jogħġobni u hekk ħadtu fuq demm id-dars.

Brenda illustrates the problem of self-esteem because like many girls she is succeeding in other areas and yet she puts the blame for her failure to achieve in physics squarely at her own feet. Her expression 'and so I think it is something that has to do with me' is then followed by the observation that she immediately decided that she did not like the subject and found it barely tolerable. The Maltese expression 'ħaddtu fuq demm id-dars' is roughly translated as 'I was immediately put off by it' but carries more vigour in the original because it literally states 'it irritated the nerves of my teeth'.

Tinkering activities

The different socialization processes for girls and boys encourage them to develop traditional gender roles. Kelly (1987, p.129) argues that

> Based on their toys and childhood hobbies boys have much greater experience than girls of tinkering activities.

With question 9 on present hobbies, past toys and early childhood games I wanted to see how many of these girls had any experience of tinkering activites.Only one of the girls had direct experience. Ethel was the only girl who said specifically that she used to play with her brother and dismantle and then fix cars. Her interview shows that she has a positive attitude to the

physics, though she thinks that boys are more likely to do well.

Her hobbies now include reading, **helping her father in the garage,** watching television and swimming. Only one other girl also mentioned playing with boys, but this in pretend play games such as Zorro. The remaining eight (8) girls did not mention tinkering activities. Four used to play with dolls, whilst two others used to pretend they were teachers. Felicity made her own toys, for example cutting up vegetables and then pretending to be a vegetable seller.

Their adolescent activities centre around reading and watching television, with a high percentage of sport activities. Most of the girls invariably mentioned summer swimming, as well as other sport such as volleyball, dancing, skating,long walks including night hikes (Helga), karate (Catherine), jogging, tennis and netball. Some also mentioned listening to music and collecting stickers and posters of their favourite pop stars.

Despite some gender-neutral sport activities it is apparent from these answers that the girls' leisure activities consolidate the modern version of stereotyped femininity. Whilst taking more care of fitness and health, they leave the male world unchallenged.

Experimenting in the physics lesson

Involvement in tinkering activities nourishes confidence in pupils' ability to cope with experiments.It has been found that in co-educational systems girls are afraid and reluctant to participate in experiments. Their lack of involvement in tinkering activities is thought to be a reason for this (Kelly, 1987; Duxbury, 1984). Asked whether they thought that experiments were important part of the physics lesson and whether they liked them (question four) all the girls answered in the affirmative and added that the experiments were essential because they aided understanding. Brenda finds that the process of verification through experiment helped one to understand the subject and avoided the usual monotony of note taking associated with physics lesson. Angela was somewhat contradictory in her answer. Initially her answer also puts emphasis on experiments as an aid to understanding through active participation. However when asked the follow-up question as to whether she liked carrying out experiments herself she answered that

> Angela: Ma tantx.Xi kultant ma nifhimx xi jkun qed jiġri, jekk mhux bis-saħħa ta' sħabi u tat-teacher.

It appeared that unless the girls understood the experiments prior to entering the laboratory, they could be of questionable value. Catherine for example, points out that experiments are exciting but hard work which is made easier if everyone in the group helps. Another theme that emerged from the interviews was the satisfaction to be derived from getting your own results and also the special understanding associated with creating a process that works. Felicity puts it thus

> Felicity: Jien nħobb ngħamilhom għax meta l-oġġett tagħmlu int stess, tkun taf minn fejn ġew l-affarijiet.

The issue of self-directed learning and practice, and of control and verification of the theoretical work through experimentation was important to all the girls in this small sample. It is difficult to generalise from this small group but it would be fair to say that despite having diverse attitudes to the subject, all the respondents were clear that the need to control their own understanding of physics through experiments was of the essence. Indeed their stand could indicate that one of the problem that girls have with physics could be that they feel they have no control over it.

Conclusion

In this article I have tried to explain girls' attitudes to physics through their own commonsense understanding and experience of it. Some of the answers indicate sensitizing concepts that could be taken up in other research studies. Although the sample is small, the diversity and lucidity of the answers should already indicate possible areas for change to practising teacher. If we start by crediting the experiences of the pupils in our own classroom we might be a better position to improve the images of physics for all pupils.

Interview Questions

1. What do you think physics is about ?

2. Do you like physics ? Why ?

3. Do you think that you need physics

a. for your future job/career ?

b. to help you understand and control the world around you ?

4a. Do you think experiments are important in the physics lessons ?

b. Do you like doing them ?

5. Do you think that boys achieve better in physics than girls?

6. Do you personally achieve well in physics? If yes, what do you think helps you to achieve well in the subject? If no, what do you think hinders you from doing well in physics?

7. Do you agree that physics is a boys' subject (i.e. suitable / relevant for boys only?) Why?

8. Do you think that girls would do better if they were to learn physics with boys ?

9.a. What are your hobbies ?

b. What were your favourite toys and activities when you were a young child ?

10. If physics were no longer a compulsory subject would you then take it as one of your options?

Names of Respondents

Angela	Felicity
Brenda	Ina
Catherine	Joyce
Doreen	Georgette
Ethel	Helga

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Classroom practices and gender roles in primary school

Jennifer Portelli and
Josette Catania

Gender identities in primary school

This article considers the construction of gender identities in Maltese primary schools. It is based on small scale illuminative observation in two classrooms in two schools. The observation sessions, five in each school and each of an hour and a half duration were held over a period of one week, from 29th November till 6th December 1990.

The sessions were carried out in two primary state schools in different areas of Malta and are named here as School A and School B. The age group chosen was in both cases six year olds, that is Year 2 classes. Classroom A (in school A) had a total of 23 pupils of which fifteen (15) were boys and eight (8) girls. In Classroom B (school B) the pupils numbered 24, with thirteen boys (13) and eleven (11) girls. Both Miss A and Miss B were female and middle-aged. Whilst Miss A was a qualified teacher Miss B was at the time a part-time instructress.

Notwithstanding the fact that the research was carried out in two different schools, the findings were very similar. This suggests that there is a certain pattern of behaviour which characterises many (see also Darmanin's article in this volume), if not all, Maltese primary state schools.

Serbin (1984, p.273) finds that

> In every classroom there is an unofficial curriculum, a part of the learning experience that is determined by the teacher's attitudes and behaviour rather than by a formal syllabus. In regard to sex-typing, much of this unofficial curriculum is 'hidden'; teachers themselves are often unaware of their own expectations and behaviours that effectively sustain and reinforce conformity to sex role-stereotypes.

In other words, as Clarricoates (1987) states, the hidden curriculum does what the official curriculum is presumably not supposed to do: it differentiates on the basis of sex. In our observations, we tried to enter the field with as open a mind as possible, though focusing our attention on the hidden curriculum. As will be demonstrated below teachers often adapted curriculum content to fit the agenda set by the hidden curriculum. We have used thick description throughout, so as to allow readers to make their own case.

Language use

One aspect of the hidden curriculum is that of sex differences in the use of language, that is, in the verbal interaction between teachers and pupils. An issue that arises from language/gender research regards the distribution of the talking time allowed to students: whether it is equitably distributed among the students and whether gender factors (among others) play a role in the distribution.

In accordance with Dale Spender (1983), we found that in these mixed-sex classes, the boys talked more, they interrupted more, they defined the topic more, and the girls supported them, so that there was a distinct male domination in the classroom as regards:

a. **pupil - pupil interaction:** In School B, we found that, during classwork, boys communicated with their classmates, of both sexes, twice as frequently as the girls did. Most of the girls engaged themselves totally-and silently-in the work they were assigned.

b. **pupil - teacher interaction:** In School B we found that during the five observation sessions the boys intervened for a total of 27 times by putting questions-academic or otherwise- to the teacher, often leaving their places to do so. On the other hand, the girls maintained their verbal contact with the teacher to the minimum, intervening, in fact, for 13 times only.

c. **teacher - pupil interaction:** In both school, we found that consciously or not, the teacher elicited more verbal participation on the part of the male pupils than of the female. In fact, the teacher usually directed most of her questions to the boys and in more than one instance turned

to the girls only after the former failed to produce the right answer.

Miss B:Ħa nara min jaf igħidli din għalfejn marru Betlem San Ġużepp u l-Madonna? Peter

Peter:Għax kien se jitwieled Ġesu'.

Miss B:Mhux eżatt vera li Ġesu' twieled Betlem imma mhux għalhekk marru... ħa nara... Jason.

Jason: Marru jsibu fejn joqogħdu.

Miss B: Le, le dik ġrat wara...u ejja għidnieha l-bierah din! Ħa nara xi ħadd ieħor... Maria.

Maria:Għax riedu jkunu jafu kemm hemm nies.

Miss B:Brava! Marru Betlem biex jinkitbu, sewwa?

(Religion lesson, 29/11/90, 08.30-09.15)

In another case, before interrogating the pupils, Miss B warned them to raise their hands so as to maintain order. A girl who defied the teacher's orders was subdued and scolded, and her answer, albeit correct, was left unacknowledged:

Miss B:U fejn qiegħduh il-Bambin?

Anna:(answer without being asked to) Ġo maxtura.

Miss B:Darb'oħra għolli jdejk!... u min ġie jarah lil Ġesu'?

(Religion lesson, 29/11/90, 08.30-09.15)

However, a boy who behaved likewise not only was not reprimanded, his answer earned him the term "bravu":

Miss B:X'qalilhom sid il-lukanda?

Carl:(answer without being asked to) Li ma kellux post.

Miss B:Bravu...il-lukanda kienet mimlija.

(Religion lesson, 29/11/90, 08.30-09.15)

Like Dweck et. al. (1978), we found that while the **amount** of positive and negative feedback directed at the children was virtually equivalent for the two sexes, there were striking differences in its **quality.** In both schools, a substantial proportion of the criticism and negative feedback directed towards boys referred to non-intellectual aspects of their work, including conduct, neatness and handwriting:

Miss A gives out a handout with an exercise to be worked out for classwork. While the children are writing:

Miss A: Christopher, oqgħod minuta kwiet...

(Maltese lesson, 06/12/90, 10.30-12.00)

Miss B: (to Michael) Mhux ħażin is-sentences, imma ktibt vera maħmuġ.

(Schoolwork correction, 29/11/90, 13.00-14.30)

The girls, on the other hand, received relatively little criticism for non-intellectual matters, so that the proportion of all negative evaluation related to the intellectual quality of their work was extremely high:

Miss A:... il-girls iktar qed jiktbu pulit...

(Maltese lesson, 06/12/90, 10.30-12.00)

Miss B: (to Romina) iva kif spellejtha ħażin? Qiegħda miktuba fuq il-blackboard!

(Schoolwork correction, 29/11/90, 13.00-14.30)

Thus girls are evidently neater, better behaved and more likely to work hard in order to do well and please their teacher. In other words, it appears to be the girls' greater compliance to the demands of elementary school that results in their failure to develop the achievement orientations necessary to succeed later on in the really challenging areas.

Discipline and Control

In accordance with Clarricoates (1987), we found that in situations of disciplinary procedure, teachers consistently and unconsciously denigrate women and emphasise the assumed superiority of men. The various adjectives Miss B (female, middle-aged) used when admonishing her pupils have sex-related qualities. When the boys got out of hand, they were regarded as "cowboy" or "imqareb"; for girls the

adjectives were "baby" or "fitta":

Miss B:Aqrali dik is-sentenza, Jason.

Jason:(long pause)... ma nafx.

Miss B:Le, ma tafx? Imma biex tagħmilha ta' cowboy taf, hux?

(Reading lesson, 06/12/90, 11.00-12.30)

Sara comes to Miss B crying.

Sara:(sobbing) Miss, Jason waqqagħni!

Miss B:Ajma kemm hu mqareb dak it-tifel!.. Ħa nara x'għandek.. u le, m'għandek xejn, kemm int baby. Mur xarrabha ftit.

(Recess, 29/11/90, 10.30-11.00)

Karen:Miss. ara Jason u Alex x'inhuma jagħmlu!

Miss B:Oqgħod kwieta u kompli aħdem, Karen.. kemm int fitta.

(Schoolwork activity, 06/12/90, 11.00-12.30)

It is obvious that the terms applied to boys imply positive masculine behaviour whereas the categories applied to girls are more derogatory. Hence, these common adjectives used by teachers contribute to social categorizing, a value-laden dichotomy, marking off males as superior and females as inferior.

Teachers have been found to apply harsher disciplinary procedures in respect of male pupils, evidently viewing boys as being more problematic, less compliant and thus, less manageable than girls. Miss B followed suit: disciplinary measures applied to girls consisted mainly in verbal tellings-off, whereas boys were subjected to solitary confinement sent behind a door; sent facing a wall in a corner of the room) and exile (sent to another teacher's classroom). This differential treatment on Miss B's part actually works in favour of boys to the detriment of the girls. By receiving 'softer' treatment, girls are being socialised to "narcissism", "passivity" or what Serbin (1984) calls "dependent behaviour", which only serves to bolster up men's feeling of power and authority. As Pivnick (1974, p.159) cited in Clarricoates, 1987) finds

"It is possible that by using a harsher tone for controlling the behaviour of boys than for girls, the teachers actually foster in boys the independent and defiant spirit which is considered 'masculine' in our culture... At the same time, the 'femininity' which the teacher reinforced in girls may foster the narcissism and passivity which results in lack of motivations and achievement."

Classroom Dynamics

Classroom dynamics-the relationships between teacher and pupils, teaching styles and attitudes- are a significant part of the hidden curriculum, carrying many assumptions intuited and felt by all concerned. Classroom dynamics are particularly affected by the characteristics of the learning group. Research has shown that in mixed-sex situations, many of the implicit messages reaching the children are of a sexist nature, concerning the relative importance of men and women in society. A typical situation illustrating this point occurred in Classroom A:

Miss A: tells the story relating Mary's visit to Elizabeth. Then she tells them that they are going to draw.

Miss A:: Min hu bravu se jipprova jaqra dak li nikteb fuq il-blackboard. Paul, ejja hawn...

(Religion lesson, 06/12/90, 08.30-09.15)

Miss A used the masculine form "bravu", which seems to suggest that only the boys were intelligent. Therefore, in this way, lessons are learned about status and worth; about what is appropriate for the two sexes to say, think or do.

Traditionally, men have been seen as constituting the 'stronger sex' in special relation to the physical dimension. In School B we found that this ideology persists. Miss B apparently considered girls as being suitable for carrying out mainly 'light' duties and errands, those that required, in other words, no particular physical effort whatsoever, such as delivering notes and collecting and distributing copybooks. On the other had, tasks that called for stronger physical capacities, such as rubbing the blackboard, bringing down a chart from the wall (both of which involved climbing on a chair) and carrying a chair along a certain distance were immediately and unhesitatingly assigned to the male pupils:

Introduction are made.
Headteacher: Hawn siġġu fejn toqgħod it-teacher?

Miss B: Li hawn baxxi wisq għaliha.

Headteacher: Naħseb għandi wieħed fl-office.

Miss B: Nibgħat xi boy bravu biex iġibu?

(After morning assembly, 29/11/90, 08.30)

This confidence in the greater strength of the male constitution also manifested itself when a member of both sexes in Classroom B was involved in a slight mishap. When a boy fell off his chair, landing rather nastily on the floor, the teacher showed minimal concern; a girl who was allegedly brought down during recess received the teacher's attention and care:

Miss B:....ha nara x'għandek.... u le, m'għandek xejn, kemm int baby. Mur xarrabha ftit.

(Recess, 29/11/90, 10.30-11.00)

Research carried out by Holly (1985) has determined that there is an overall domination of the classroom situation by the male sex. Accordingly, in Classroom B, boys certainly had supremacy over classroom space, authorizing themselves to frequently leave their places for various reasons-often of a non-academic nature (to chat or tease friends). On the contrary, the girls preferred to restrict themselves to the space occupied by their desks, deserting their territory only when they deemed it necessary (to sharpen pencil; to collect drawing book from shelf; to throw rubbish in bin). In accordance with Scott (1980) in Classroom B we found that the boys were the chief source of mischief. They tended to make more noise and disturbance whereas the girls were shyer, quieter and more docile:

Stephen, at the back of the classroom, calls out to Peter, seated quite far away from him

(Maths lesson, 19/11/90, 09. 15-10.00)

Maria and Alison whisper to each other behind Miss B's back, only when she is not looking.

(Maths lesson, 19/11/90, 09.15-10.00)

In Classroom A the boys participated actively in the lesson, while the girls listened passively. Girls' feminine traits, such as timidity, mean that take less part during the classroom activities. In fact in a group of three boys and one girl, it was a boy who was constantly suggesting which colours to use when drawing. The boy seemed more confident while the girl seemed to comply more.

It has been suggested that the sex difference in children's behaviour may not be 'real' at all, and it may reflect no more than the attempts of both sexes to present themselves in a socially desirable light (Dweck and Licht, 1987). That is, girls may be responding in a way makes them appear modest because modesty is in line with society's stereotype of what females should be like. Boys, in turn, may be responding in a highly confident manner because self-confidence is consistent with society's masculine stereotype. In fact, we were particularly struck by the fact that neither Miss A nor Miss B tried to inhibit deviant behaviour on the part of the male pupils, even when this was to the annoyance of other pupils:

In a corner of the classroom, James and Simon are making a lot of noise pushing their tables while Janet is talking.

Miss A: Janet, be quiet.

(English lesson, 29/11/90, 10.30-2.00)

Jason and Alex are seated near each other, making loud noises, clearly disturbing nearby pupils. Miss B does not react.

(Schoolwork activity, 06/12/09, 11.00-12.00)

Apparently, they consider these boisterous, rowdy and aggressive patterns of behaviour manifested by the boys as 'natural' prerogatives of the male personality, features which must be accepted rather than confronted or changed.

Hence, the societal myths of stereotypes and the teachers' own cultural expectations influence their ideology regarding sex roles, what girls and boys should be 'naturally' like and treated. However, the effect of reacting likewise to the 'natural' difference in boys' and girls' behaviour may be to **exaggerate**, reinforce, encourage or maintain whatever sex differences there **actually are** in this area. According to Browne and France (1985) this happens in most classrooms largely because such establishments tend to uphold society's perceived norm of behaviour, and so help to perpetuate the sexist stereotyping and

discriminatory practices children experience from birth.

LEISURE ACTIVITIES

Leisure activities that pupils engage in at school are very definitely affected by sex-role stereotypes. This applies particularly to the school playground which is usually a typical example of the sexual division of space, or of sex-specific territories.

During recess, both in School A and in School B, the play-ground was dominated by boys, while the girls congregated around the edges or in secluded corners. Sex-stereotyping was also evident in the play preferences of the boys rushed out of the classroom and indulged in energetic, boisterous games, whereas the girls participated in quiet activities, preferring to sit on a low wall playing "mother" with their dolls, This might be influenced by the uniform girls and boys have to wear. The fact that girls must wear skirts may be more restrictive and inhibiting than wearing trousers, as boys do.

A CRITICAL INCIDENT

One of the primary goals of an infant school is to encourage children to explore new roles. Children are at school to learn to do new things, to be exposed to new experiences, new toys, new behaviours and new activities, which they have not yet had the impulse or opportunity to explore. Unfortunately, these ideals are far from being fulfilled in our classroom where clear-cut roles boys and girls should occupy are firmly established. This claim can be illustrated by significant episodes concerning two particular leisure activities:

A Religion lesson

After saying the Hail Mary, the teacher explained the meaning of "Sliem għalik Marija bil-grazzja mimlija, il-Mulej miegħek". The teacher explained that Mary was a very good girl who used to help her mum in the housework and she always obeyed. Then, one day, an angel appeared to her. After the explanation, the teacher chose Clint and Natasha as the angel and Mary respectively to act this little scene:

Teacher (to Natasha): Ina, ibda taparsi qed tnaddaf il-mejda.

Natasha did as she was told. When it was over, the teacher chose another girl to re-enact the same scene.

(School A, 20/11/90, 8.30-10.00a.m.)

It is true that the Old and New Testaments are of a patriarchal nature, but did the teacher have to carry this idea to the extreme by asking the girl acting the part of Mary to clean the table? Yet, it is known to all that 'Mater Admirabilis' depicts Mary praying or studying when the angel appeared.

Christmas play

For this play, the teacher chose a girl as Mary, a boy as St. Joseph, another as the angel, 3 boys as the three Kings, another 4 boys to represent the shepherds and a girl to carry the baby Jesus to Mary. The rest of the children formed a choir.

(School A, 6/12/90, 1.30-2.30pm)

It can be noted that the teacher chose a girl to carry baby Jesus whereas the boys besides outnumbering the girls in the play, were allocated more interesting roles.

Religion Lesson

The class was preparing for the Christmas concert to be held two days later.

Teacher: Tgħallimtha tiegħek, Susan?

Susan: (nods).

Teacher: Fejn hu San Ġużepp? Andrea....fejn hu? Ma ġiex illum?

Pupil: Ma jiflaħx, Miss.

Teacher: U ħej, issa x'se nagħmlu? Pitgħada l-play, ta!

Pupil: Agħżel xi ħadd ieħor.

Teacher: Lil min tridni nagħżel? Ħadd mill-boys ma jaf jaqra daqs Andrea. Ma tiftakarx kemm domna l-aħħar darba biex insibu San Ġużepp tajjeb? Ħeqq, ikollna nġibu tifel mill-klassi ta' Mrs. C.

(School B. 6/12/90, 8.30-10,00am)

Miss B felt that none of the boys was suitable for the role, But instead of resorting to a member

of the opposite sex-who could have been easily disguised-she preferred to include a boy from another class. Evidently, Miss B thought that a girl occupying a male role was inconceivable.

The Manifest Curriculum

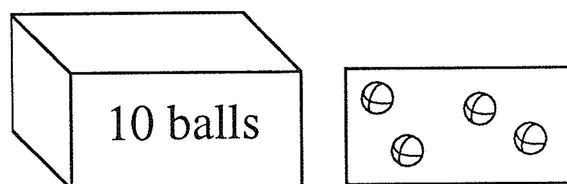
Within the primary school, it is assumed that girls and boys learn the same subjects. However, the manifest curriculum is continuously making implicit distinctions between boys and girls, especially through the materials being used. Learning materials often pass on sex-stereotyped messages which construct a gender identity in favour of males and which continue to reinforce inequality between the sexes.

Alleen Pace Nilsen (cited in Spender 1980) coined the phrase "the cult of the apron" to describe the depiction of women in learning materials. We found that the books and materials used within our schools abound in crude and inaccurate images of women, which only serve to 'indoctrinate' children in sexual inequality. Whereas men are frequently portrayed outside the home, in the 'real' world, women are portrayed almost exclusively in the home, in a passive role. In fact, references to females in Classroom A were few. Picture and example representations of women and girls included a woman cooking, a girl helping her mother or simply doing uninteresting things. The chart the teacher referred to during the English lesson contained the message that Jane, a girl, plays with a doll, while Peter, a boy, goes to school. These pictures and examples are more sex-biased than the real world. The world depicted was that of males who were active, dominant and involved in interesting activities whereas females were shown almost entirely in domestic roles, without initiative, passive and afraid. The implicit message for children is that female aspirations for the future should be modest and service-oriented (Meighan, 1986).

Moreover, a common feature about working people with Class A was that job names which can be sexually neutral were assumed to refer only to men. So when reference was made to a postman, a farmer, the pronoun 'he' was used. This usage gives a distorted picture of real-life for it is now the experience of many of our children that even women can be 'postwomen', 'policewomen', 'bank manager', 'doctor' and so forth.

The content of the mathematics curriculum is also being geared to boys. In Class A. Mathematics charts contained toys which appeal more to the boys, like a car and a kite. Again, the pictures which Miss A put on the flannel graph included marbles, balls, etc. - and she called out the boys to work out these sums. Miss A actually emphasized this: "**Se mmorru nixtru xi ħaġa li jħobbu l-boys l-iktar**".

The teacher puts the following pictures on the flannel graph.



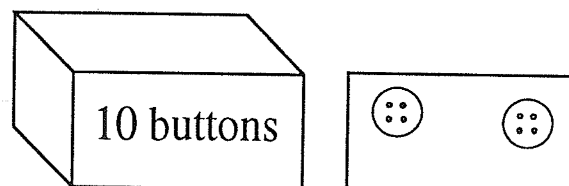
Teacher: Mario kemm għandna balls hawnhekk?

Mario: 10 u 4.

Teacher: How many altogether?

Mario: 14.

Teacher: Bravu. Issa waħda għall-girls. Se mmorru għand tal-buttuni.



Teacher: Anne, how many buttons altogether?

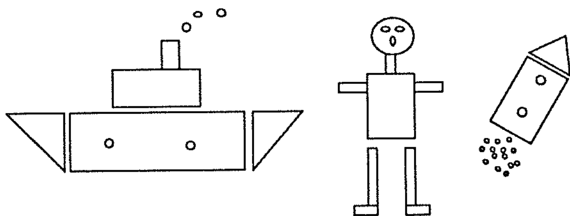
Anne: 12.

Teacher: Good.

(School A, 29/11/90, 8.30-10.00am)

As can be noticed, the one example for which the teacher called out a girl included buttons.

Similarly, in Class B, during a mathematics test, an exercise concerning the counting and identification of shapes involved figures traditionally related to boys: a ship, a rocket and a man.



(School B, 6/12/90, 8.30-10.00am)

At this point, it is important to consider the implications of the impressions girls get of the 'mathematical' world. The world of maths is being seen as male and this notion will be reinforced in later years in several textbooks by the number of questions revolving around men and boys.

Within the classroom teachers unknowingly tend to define certain activities which are presumed to be appropriate for girls and boys. This occurred in Classroom B. When it came to the music lesson, the teacher allocated certain pieces of a rhyme to the sex she believed it was more appropriate for-naturally according to her sex-role ideology- so that, where balls and boats were involved, it applied to boys: where dolls and prams were involved, it applied to girls.

Teacher produces chart on words of a song are printed:

I bounce the ball	-4
I rock the doll	-4
I sail the boat	-4
I push the pram	-4

Teacher: Issa ha nkantaw is-song li tgħallimma l-aħħar darba, u se nagħmlu hekk...il-boys se jkantaw tal-"ball" u mbagħad il-girls jkantaw tad-"doll", fhimtu? Imbagħad jerggħu il-boys "I sail the boat" u fl-aħħar il-girls "I push the pram", all right?
(School B, 4/12/90, 2.00-2.30pm)

This is a supreme example of sexist attitude which discriminates between girls and boys, telling them exactly what they should be interested in. The outcome can be the establishment of a self-fulfilling prophecy. As Clarricoates (1987) suggests, it would seem that teacher geared the subject content of lessons in favour of the boys because of the problem they have in controlling them as was earlier noted. However, this was done at the expense of the girls, who were being totally isolated from the curriculum content.

CONCLUSION

Apparently, therefore, educational institutions are agents through which sexism is fostered and developed, agents through which the sexes are made unequal. It occurs at every level of experiences within schools. As long as schools persist with these differential practices, sexism will be maintained and reinforced: the power differences of the sexes are perpetuated. And as Spender (1983) declares: "any education system which continues to base its theory and practice on the belief that males are the paradigmatic human beings is to be condemned".

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Extended Review
Teacher Evaluation: Educative Alternatives
A.Gitlin and J. Smyth (1989) London, The Falmer Press

This is an intellectually satisfying and pedagogically practical text on teacher evaluation. Noting the tendency to use concern about education to evaluate teachers' work in ways that are divorced from the understanding and experience of teachers and pupils, Gitlin and Smyth correctly start with an informed critique of current evaluative practices. In accepting external evaluation many teachers and pupils do not use internal inquiry and reflective self-evaluation. They become more concerned with meeting 'minimalist standards of outside experts' (p.viii). The movement away from impositional modes of teacher evaluation to the two alternative 'educative' forms proposed in this text, is based on a just and liberating contestation of the dominant impositional mode. Gitlin and Smyth make a sustained case against this mode, which whilst oppressing teachers does not challenge current (and often conservative) methods and aims of education practice.

The critique is meaningful in the alternatives it implies. Using Bernstein's (1983) idea of the true conversation, the point is made that it is only when teachers can enter into a dialogical relation of equality with other teachers that they can both understand and change their practice. In this process egalitarian and democratic ideals are realised through teacher empowerment. In the educative form of teacher evaluation, many lessons can be learnt. Amongst the most essential is stress on the necessity of taking the point of view of the participant, a principle which teachers can usefully practice in class. With recent constructivist work on children's learning that emphasizes the need for learners to <u>own</u> their own knowledge, Gitlin and Smyth's proposals for teachers enlarged self-knowledge will certainly be a crucial beginning. Moreover, educative evaluation moves teachers towards the consideration not only of better ways of teaching but also to broader questions to do with the moral and educational worth of teaching (p.31).

In developing reflective practice teachers of necessity engage in the questioning of texts and materials. They develop a sense of the history of teaching and break their usual taken-for-granted understanding of it to critically confront tradition. In their own review of these histories and traditions the authors provide an important critique as well as a path to hope in alternatives. Because they show what is and has been they also indicate the road not yet taken. In their proposals for collaborative learning, both the individual voice and the collective needs of teachers, pupils and schools can be addressed. In collaborating with others including their own pupils, teachers can find the solidarity for the courage and vision to embrace new practices in education.

Horizontal evaluation, the first model Gitlin and Smyth propose, encourages participants to analyze the relationship between teacher intention and practice, a process which allows the value inherent in all teaching to be examined (p.63). The chapter is complex and philosophically tight, but the practical implications are clear. Teachers' ask questions about their own and others practice and relate this to past events. In this way they challenge their own assumptions and knowledge, become thinkers as well as doers in the process. In Gitlin and Smyth's words (p.75) teachers can base decisions on reason rather than habit. The second alternative proposed is the clinical supervision method. Gitlin and Smyth have done much to rescue this model from inappropriate application

and subsequent distortions. But it is not clear in their interesting chapters on clinical supervision what advantages could be had over horizontal evaluation. Perhaps the more structured work involved in clinical supervision, including the observing and creating of text about teaching makes this model more amenable to current policy. For example, mentor training is now an important part of both initial and in service teacher education. With pressures for accountability still looming large on the horizon, clinical supervision as proposed here can give very concrete and immediate feedback on the evaluative project. This contrasts with some of the indeterminancy inherent in the horizontal model.

The book has the qualities of a gospel. It is addressed to all people of goodwill. It records past events, calls for reflection and invites promises for improvement. Like a gospel however, its ultimate goal will not be realised unless the practices can actually be implemented by teachers. In the meantime we can all become true believers.

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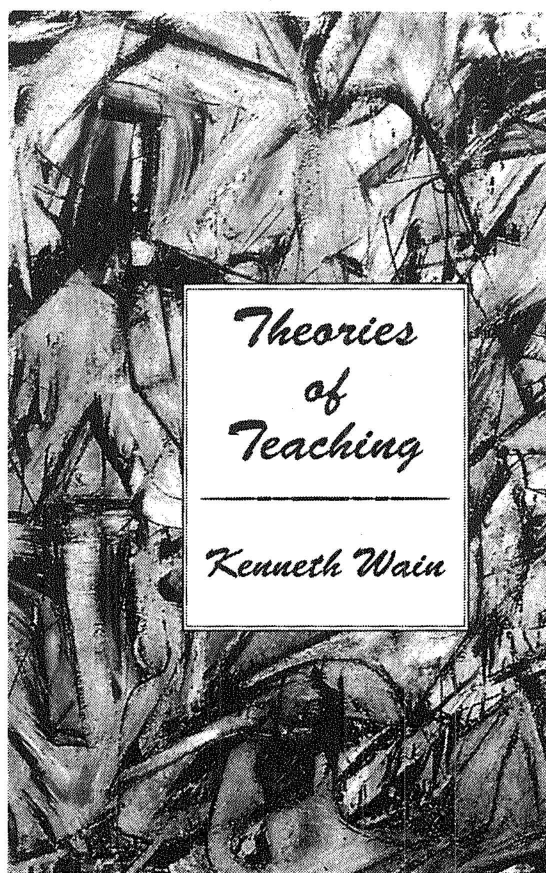

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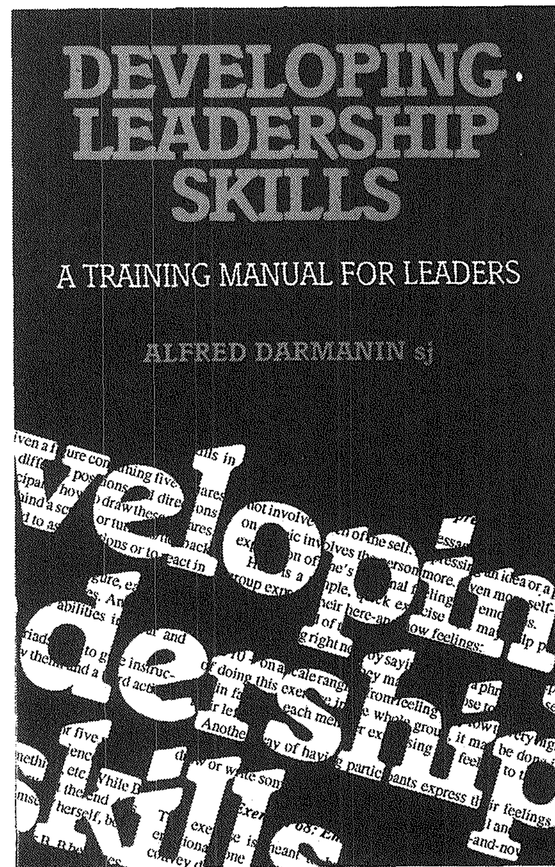
Josette Catania and Jennifer Portelli have just finished the B. Educ (Hons) course this year. Josette Catania has been doing research for her dissertation on the use of a lifeskills curriculum for remedial teaching whilst Jennifer Potelli has been working on the methodology of teaching Italian.



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