

Encouraging parents to stop pigeon-holing their daughters: The “*Maths Multiplies Your Choices*,” campaign.

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Between mid-July and early November 1989, the Department of Labour concluded a statewide media campaign to encourage parents to think more broadly about the career options for their daughters. I plan to provide some background on the campaign, including its aims, and to outline the response to the campaign.

Background to the campaign

The Minister for Labour is the Minister responsible for improving women's employment in Victoria. Advising the Minister on these issues is a Ministerial Advisory Committee on Women's Employment, a tripartite committee with representatives from the trade union movement, employers and government. Ms Fay Maries, the first Equal Opportunity Commissioner in Victoria was the independent chairperson during 1988 and 1989.

Not surprisingly, one of the main concerns of the committee was the sex segregation of the labour market, reflected in the fact that the majority of women are employed in a narrow range of occupations which are low

paid, low status and have poor career structures. Despite the Increased number of women in the workforce, and the Introduction of Equal Employment Opportunity policies and programs, there are still low numbers of women in scientific, technical and trade occupations. Of women in the paid workforce, 70.9% work in clerical, sales or professional areas (and a large proportion of the professions are female dominated areas such as nursing and teaching).

The committee felt the need for large scale attitudinal changes regarding the range of occupations seen as appropriate and possible for women. This led to consideration of the use of media to change these attitudes. The committee recognised the difficulty In trying to affect the range of occupations undertaken by women by focussing on women who are already in the workforce. Rather a critical point of intervention was seen to be when girls are forming views on their future working lives. The idea of a media campaign thus narrowed to focus on the career choices made by school girls and at the role of their parents in influencing these choices. The committee thus recommended to the Minister for Labour that he provide funding for a campaign to raise awareness of job opportunities for women in scientific and technical occupations.

The development of the campaign drew considerably on research into subject and career choices made by students and particularly by girls. Studies such as Suzanne Dillon's *Jobs for the Girls – Why Not Technical* indicated that parents held stereotyped views about the career options for their sons and daughters.

This was reinforced when I attended a group discussion organised by an advertising agency to explore the attitudes held by mothers about their daughters' careers. The

researcher passed around a list of technical and scientific occupations and asked each of the women to place the name of any of their children next to occupations which the mothers thought would be suitable for them. With one exception. The mothers placed the names of their sons next to various jobs; the exception was a mother whose daughter was interested in medicine and who had thus indicated that the occupation of medical doctor would be one her daughter might pursue.

In March 1989. Nell Pope, the Minister for Labour, approved the campaign and allocated up to a million dollars to it. The Women's Employment Branch of the Department of Labour was responsible for making the campaign a reality.

Aim of the Campaign

The long-term aim of the campaign was to increase the number of women working in a wider range of occupations and especially in scientific and technical occupations. The immediate aim of the campaign was to encourage young girls (aged 13-15) to consider technical and scientific occupations as career options for themselves, and therefore to choose subjects such as maths and science which will enable them to pursue these career options.

The primary target for the campaign was not young girls. but their parents; girls aged 13 to 15 formed the secondary target.

The Women's Employment Branch was aware that increasingly girls were being urged to stay on at school and keep up their maths in particular; a number of programs were running in schools with these objectives. Girls, however, were not generally making the link between these messages and career outcomes. The influence of parents on

subject and career choices meant that parents also needed to be aware of the way in which subject choice affects labour market outcomes. The effectiveness of programs to influence girls' subject and career choices would be eroded unless these programs were backed up at home.

The essential message of the campaign was "don't sell your daughter short by thinking too narrowly about the Job opportunities open to her". A number of other messages supported this central theme:

- .. *that there is a range of career opportunities in scientific and technical areas, most of which are better paid and have better career paths than jobs traditionally occupied by women (such as clerical, sales and process work).*
- .. *that about 57% of women with dependent children work, and most women will spend 20-30 years in the labour force: therefore it is important for girls to think about careers, not just about jobs.*
- .. *that it is a myth that work in scientific and technical jobs involves "rough company" and dirty work environments.*
- .. *that more and more jobs require a knowledge of new technology (such as computing).*

These messages were contained in the brief to five advertising agencies who were invited to submit campaign proposals. HDM Mattingly produced a campaign concept that admirably addressed these issues and was given the job to deliver the campaign.

Composition of the campaign

Perhaps one of the most attractive aspects of the Mattingly proposal was its use of different media for different audiences.

The campaign comprised:

- .. *two 30 second television commercials, primarily aimed at parents, but shown during "family viewing time" so that the whole family would see them;*
- .. *six 30/45 second radio advertisements which were aimed primarily at young girls and went to air on the radio stations most listened to by that target group.*
- .. *a series of press advertisements Including ethnic press;*
- .. *tram panels, aimed at parents as well as students commuting to school.*
- .. *Of these. the tram panels were not so successful In prompting a response to the campaign, but the Department got its money's worth as trams containng the ads have been spotted quite recently.*

In support of the advertising campaign, the Department of Labour provided a telephone information and advice line to answer parents' questions about the campaign, about subject choice and career opportunities for girls. The television advertisements prompted parents to ring for more information. Letters were also sent to the parents of all girls in Year 10 explaining the message of the campaign and encouraging parents to find out more about it.

Booklets were produced to assist parents to find out more about the link between subject selection and career opportunities for their daughters.

The campaign ran from mid-July 1989 to early November to coincide with the time that students were selecting subjects for the following year. During this time almost 300 television, and over 900 radio and 16 newspaper advertisements were presented and around 25,000 pamphlets and 900 information booklets were distributed.

Response to the campaign

In assessing the effectiveness of the campaign, there are three main indicators:

- i)* telephone calls and Informal feedback received by the Department of Labour;
- ii)* the formal evaluation undertaken for the Department by a market research company; and
- iii)* the maths and science enrolment figures for girls in Years 11 and 12.

Telephone calls: During the campaign, 1,682 calls were received by the telephone information line. Just over half of the calls were from parents and most of these were mothers calling on behalf of their daughters (77% of parents calling). The next largest group of callers was girls (32% of callers). Given that girls and their parents were the two main target groups of the campaign, this indicates that the campaign was successfully reaching the target audience.

Informal feedback to the Department of labour from teachers, educational and employer organisations was very positive.

Formal Evaluation: The formal evaluation of the campaign conducted by “The Research Business” and based on interviews before and after the campaign with approximately 400 parents and 400 Year 10 girls, indicated an extremely high level of awareness of the campaign by both girls and their parents: 98% of girls In Year 10 surveyed and 91% of parents surveyed “had seen or heard advertising about encouraging girls to continue with maths and science in Years 11 and 12” (The Research Business, 1989, p.(x)). This awareness was not superficial: the research indicated that both girls and parents were able to recall the central campaign messages such as “Career opportunities are limited without maths-science” and “Girls should not be pushed into traditional jobs”.

The evaluation study suggests that the campaign resulted in significant attitudinal, perceptual and behavioural changes. This was so for both girls and their parents although the greatest effects appear to have been amongst girls. Some of the findings of the evaluation were:

- .. *after the campaign, 40% of girls said they were more interested In science-maths than humanities, compared to 27% before the campaign;*
- .. *choice of subjects at the end of Year 10 shifted from 43% of girls choosing science-maths before the campaign to 63% choosing science-maths after the campaign;*

- .. *after the campaign, more girls indicated that they were now receiving 'a lot' of encouragement to continue science and maths at Years 11 and 12;*
- .. *after the campaign, more girls had decided to continue with maths-science subjects (42% compared with 20% before the campaign) with girls who had not previously made up their minds and girls who had previously chosen to study maths only choosing maths-science;*
- .. *parent's perceptions of the direction their daughter would choose at the end of Year 10 changed strongly in favour of science-maths (from 28% to 41% of parents who thought their daughters would choose these subjects); and*
- .. *there was a significant increase in the number of parents who perceived that a background in science-maths provides better career opportunities (from 41% to 64% of parents).*

At the time of writing, the statistics on actual enrolments in maths and science subjects at Victorian secondary schools were not available, so it is not possible to assess whether the campaign actually affected girls' subject choices. This data should be available later in 1990.

Lessons from the campaign

As indicated above, response to the campaign was generally very positive. There was, however, some negative feedback from humanities teachers and schools trying to cope with increased interest in maths, chemistry and physics. There were concerns expressed that the campaign

encouraged a focus on maths and science to the detriment of humanities, and that the campaign stigmatised or denigrated girls who chose to study humanities. In reality, the campaign urged girls to consider the implication of their subject choice for future education and job opportunities. The campaign did not say "All girls should do maths", It said "Before you discontinue with maths, make sure you're aware of the implications for your career options". However, it is clear that this message was not conveyed adequately to some teachers and schools.

Another issue which arose during the campaign was the level of support provided in schools to students who changed their subject choices to continue with maths and/or science. Clearly, this places demands on schools in terms of adjusting teaching loads. None-the-less, when female students decide to continue with maths and science, it is vital that schools support students in undertaking their studies.

Both of these issues (criticism that the campaign denigrated humanities and the issue of support in schools) could have been addressed through more contact and discussion with teachers as part of the campaign. Such interaction would have enhanced the effectiveness of the campaign.

Another lesson from the campaign was that a few advertisements in the ethnic press are not sufficient to induce a response from non-english speaking background communities. There were few telephone calls to the Department's Information and advice line despite advertising and provision of a special telephone line with interpreter facilities. In retrospect, an approach to these communities would have been more effective with greater use of programs on ethnic radio stations and with greater interaction with these communities. For example, bi-

lingual speakers at parent nights in schools with high proportions of NESB students may have conveyed the messages of the campaign more effectively and enabled debate on the issues.

Hopefully, some of these lessons will be useful to other Australian States who plan to run the “Maths Multiplies Your Choices” campaign. Western Australia, South Australia and Tasmania have all expressed interest in running the campaign and the Minister for Labour in Victoria has agreed to provide the campaign materials to these governments in an effort to encourage parents in other States to stop “pigeon-holing” their daughters as well.