Women's participation in product design education

RESEARCH

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Abstract

Women are significantly under-represented on product/industrial design degree courses in the UK with obvious consequences for participation in the professional arena.

This paper

- presents evidence of the low numbers of women applying and enrolling on courses
- considers the possible effects for the industry
- explores some of the issues raised as a result of ongoing research into the experiences of women in pre-degree education (primarily school education).

The paper concludes with proposals for positive action and the responsibilities of schools, further/higher education and the profession to promote product design ad a suitable education//career post for women.

As a design tutor, an ergonomist and a woman who purchases and uses products, it is perhaps inevitable that I should become interested in the low number of women applying to Product/Industrial Design degrees in the UK.

How big is the problem?

Art and Design Admissions Registry (ADAR) is the main route through which design degree students apply to their courses and has proved a useful source of statistics for analysis.

In 1994 the subject area with the lowest proportion of women's applications was Product/Industrial Design at only 12% (*see figure 1*). This compares to textiles at the other extreme with 94% of applications being from women. The situation was little changed in 1995 where 14% of applications to Product/Industrial Design were from women.

Product/Industrial Design is also bottom of the list when the figures for women alone are examined (*see figure 2*). In 1994 only 0.7% of women's applications were to the Product/Industrial Design courses. In 1995 this increased slightly but remained below 1%. Most women's applications remained in the traditional areas of textiles (19% in 1994), graphics (13%) and fashion (11%). Women also predominate over men in the predictable areas of textiles (94%), fashion (84%) and jewellery (79%) [figures based on 1994 ADAR statistics].

Obviously, low application rates result in low enrolments on degree courses and subsequently low participation in the profession. In 1995 women represented 16% of ADAR acceptances onto Product/Industrial Design courses – an improvement from 1994 when the figure was exactly the same as the proportion of applications (12%). The Chartered Society of Designers, while not wholly representative of the profession, does provide an indication of women's involvement in professional practice through its membership lists, where only 11% of Product Design registrations are for women.

Is it an issue?

It might be argued by some course managers that the gender balance of students is not a particularly important issue since courses seem healthy with regard to applications and in general there is not a problem of under-recruitment.

Obviously, the usual arguments for the active inclusion of women in any profession apply equally to the design profession (*see figure 3*) and positive examples can be quoted from industry's experience (e.g. Jill Shurtleff's work for Gillette in developing the Gillette Sensor for Women). However, although the statistics may have improved slightly, the same concerns and gender divisions exist today as were described by Margaret Bruce in 1985.

In higher education, the issues may appear in a somewhat different form but are still relevant to the experiences of both men and women at a crucial stage of their personal development and at a point where they are laying the foundations for their future approach to design in a professional capacity.

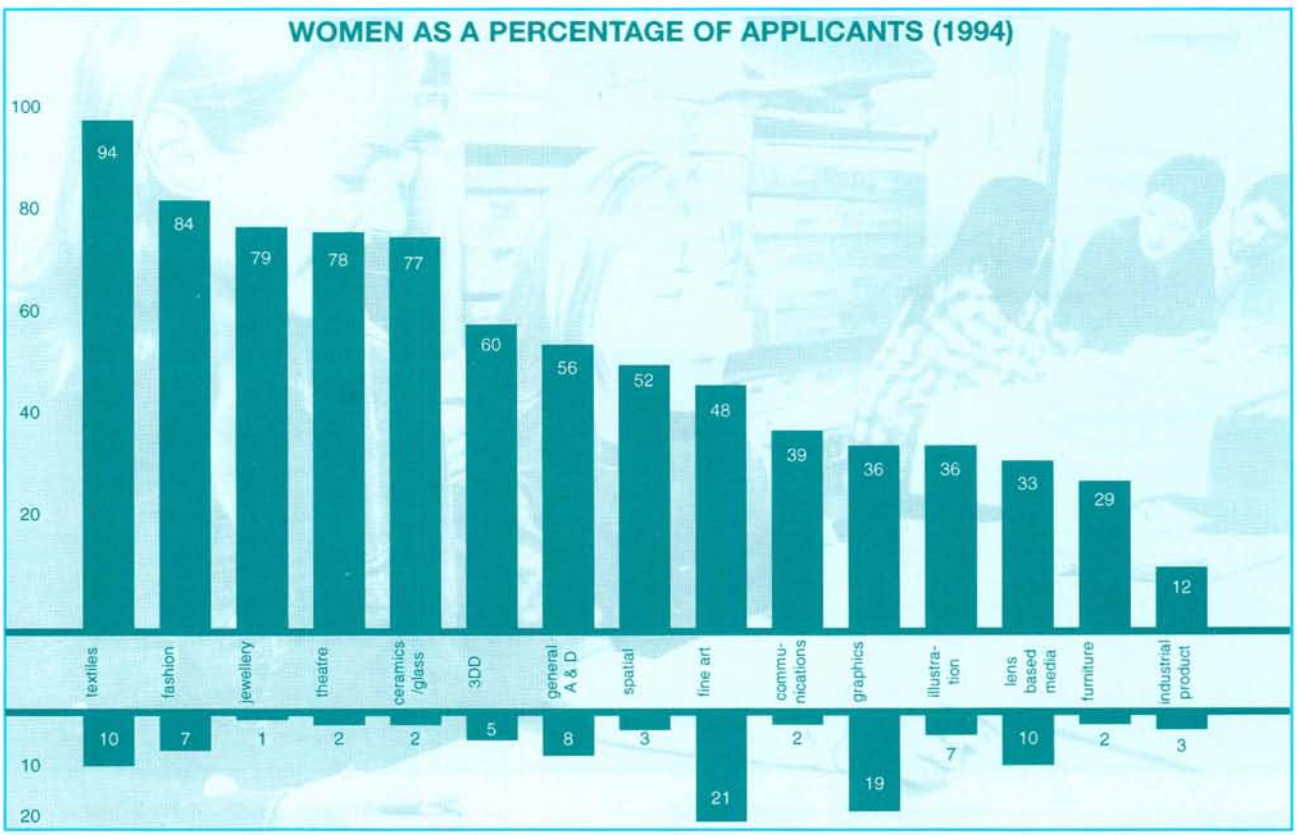

Figure 1

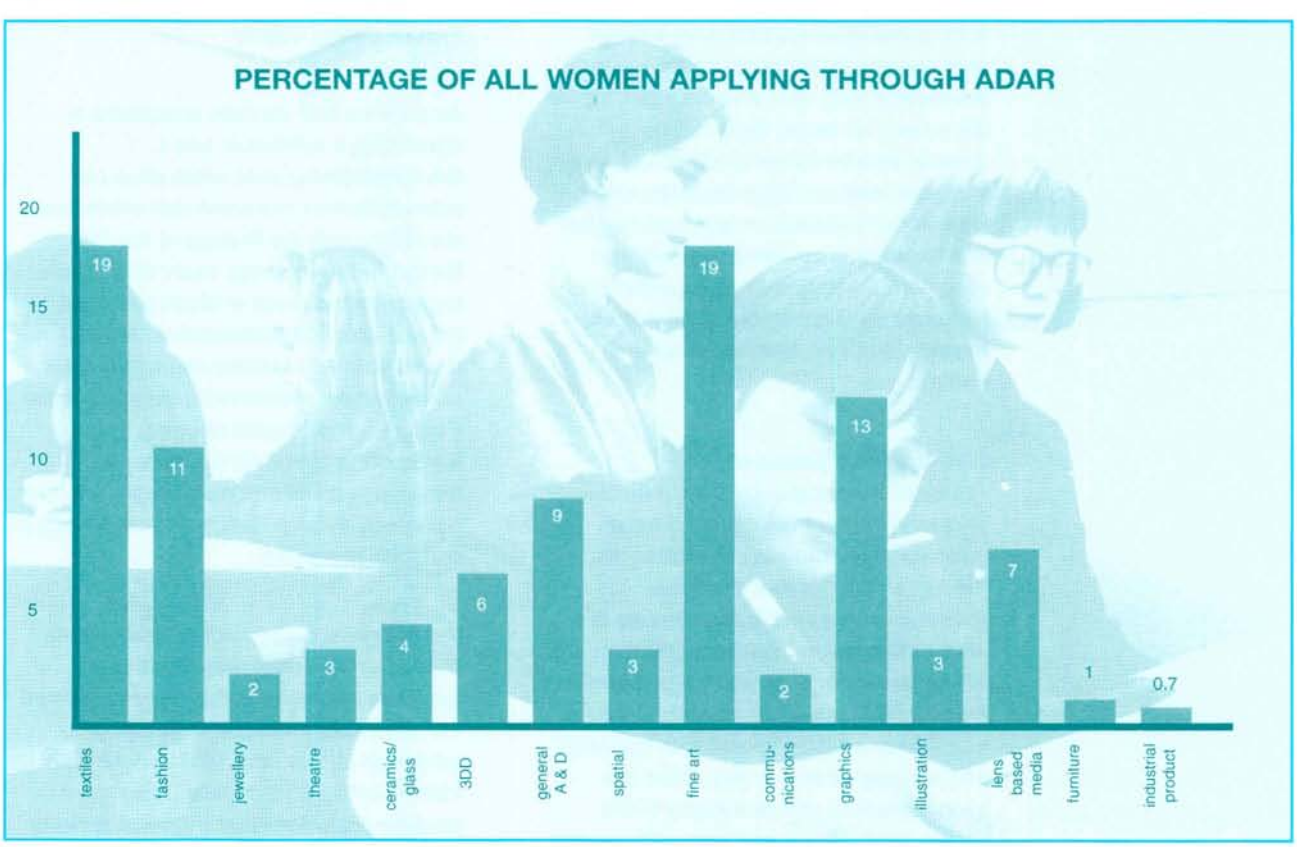

Figure 2

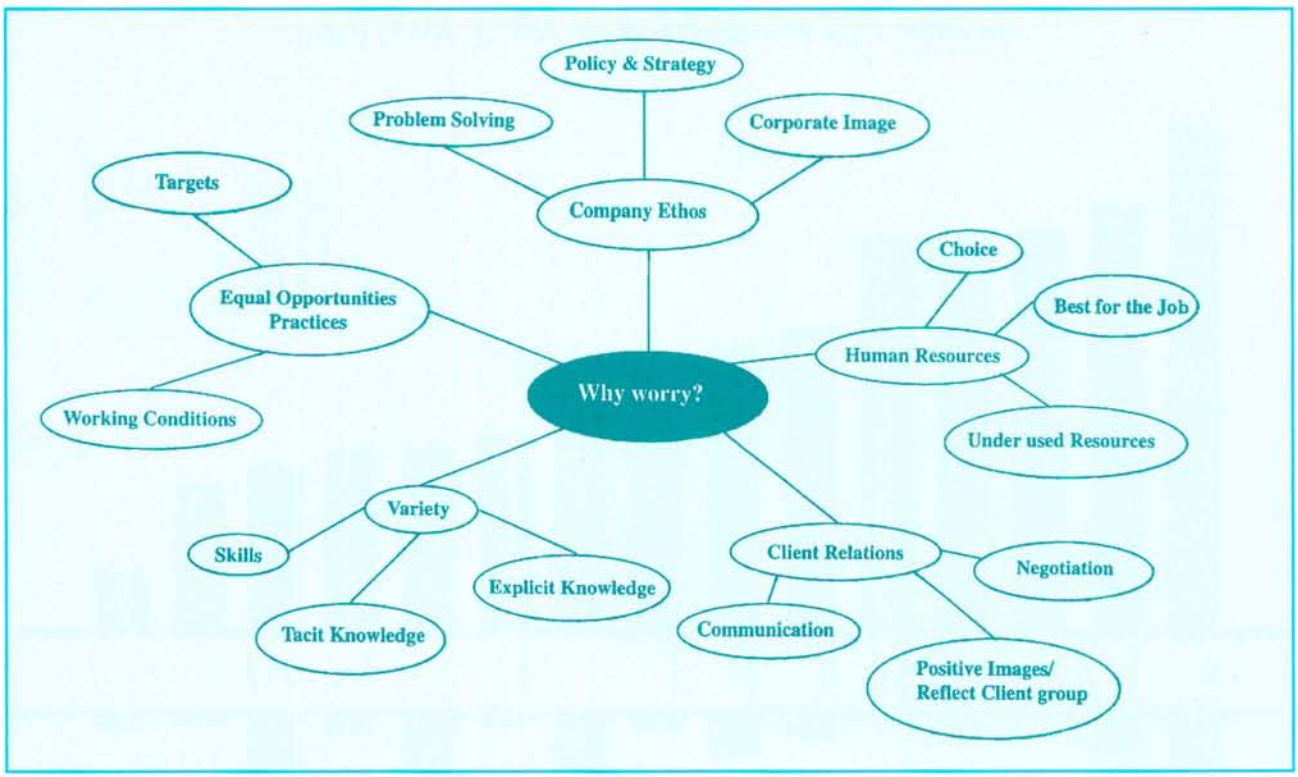

Figure 3

I am particularly concerned that homogenous student groups mean a lack of diversity in the tacit knowledge available both to individual students and, through peer learning in the studio environment, to the student body as a whole. I yearn for the day when I no longer have to "borrow" (female) interior design students to explain to (male) product design students what women do in showers or point out that the one female product design student in a group of 25 men cannot be expected to represent the experiences of all women, regardless of age, ethnicity or cultural background!

Why is there a problem?

At Leeds Metropolitan University we are particularly concerned that such small numbers of women are attracted to the Product Design route of the Three Dimensional Design Degree. Despite the recent changes and resource pressures that will be familiar throughout Higher Education, the course has maintained its commitment to a student-centred approach to teaching and learning. That is to say, within the overall structure and philosophy of the course, students are encouraged to explore their own personal interests and approaches. It is not a heavily technical course and greater emphasis is placed on the human context than on the industrial context, on research and reflection than on making and producing, on design issues than on design objects.

As such we feel we have succeeded in developing a curriculum and a teaching/learning style which does not present barriers to women and which has a resonance with the findings of the APU Design and Technology study (SEAC, 1991) in terms of the areas in which girls have interest and high achievement. Informal discussions with existing degree students and with those women who did apply to the Product Design course at Leeds Metropolitan University turned the focus of attention to experiences of design at school – primarily through design and technology in one form or another.

A questionnaire survey of girls from three schools in the Leeds area found that approximately half the respondents claimed that they were interested in studying art/design after school. Of these, 18% indicated Product/Industrial Design as a possible area of interest – again a minority interest for women.

However, comparison of schoolgirls' expression of interest with what actually happens with ADAR applications demonstrates some significant differences. For example, textiles, which has the highest rate of ADAR application, ranked only fourth for schoolgirls' interests (after fashion, jewellery and graphics). It would appear that something changes their aspirations between school and entry to Higher Education. Art and Design courses stand apart from many other disciplines in that most degree entrants (73%-89%) have undertaken some form of diagnostic, pre-degree education at FE. An obvious consideration therefore had to be schoolgirls' actual experience of a design discipline in relation to their interest in pursuing it beyond school.

At first sight, there appears little correlation between previous experience of a design discipline and interest as an education/career path. However, removing fashion and jewellery leaves a very close relationship in the ranked interests. It could be argued that, although not studied as a formal topic in school, young girls have a great deal of experience in fashion and jewellery through other influences (e.g. social interests, popular media). The results would seem to indicate, perhaps not surprisingly, that experience of a design subject is more likely to lead the girls to identifying it as a suitable education/career progression.

In answer to an open-ended question about what Product/Industrial Design means to them the schoolgirls produced a range of responses which demonstrated some understanding, but, also misunderstanding and confusion. A concurrent survey of degree applicants and enrolled Product/Industrial Design students does, thankfully, demonstrate a clearer understanding and a greater recognition of such things as form, style, ecology, ergonomics, manufacturing and retail issues.

So, although 41% of the schoolgirls claim to have experienced Product Design, their perceptions from that experience are confused and it is in actuality a smaller percentage who are able to make an informed decision regarding their aspirations for Higher Education study.

Preliminary analysis of a more recent survey, of both schoolgirls and schoolboys, includes an examination of motivation and attempts to understand gender differences in terms of the factors which can attract or detract from design activities.

The most common things listed as giving enjoyment in design related schoolwork includes: 2D work and graphics (23% and 20% of respondents respectively), 3D work (20%) and practical/hands-on activities (19%). However, there appear to be gender differences in the data. So, for example boys are more likely to enjoy the 3D work (26% of male respondents) and practical aspects (23%) than are girls (15% and 17% of female respondents). Girls are more likely to enjoy research (18% of female respondents as compared to 4% of male respondents), presentation (9% as compared to 3%) and seeing the fruition of their design ideas (13% as compared to 4%).

Similarly, though less responsive to identifying what they disliked, gender differences occur in the dislike of technology (6% of female respondents and not listed at all by male respondents), and tedium (repetitive/ mechanical activities) which is listed by 13% of females as compared to only 3% of males.

In asking what might either attract or deter pupils from pursuing a career in Product Design, pay/perks of the job figured in both (good pay would attract, bad pay would deter). However, males appear to be more concerned with this aspect than females – as demonstrated by 46% of male respondents and 22% of female respondents listing it as a possible attraction. On the deterrent side, 16% of males and only 9% of females cite pay. Females seem to pay more attention to the intrinsic interest of the job at 14%, whereas only 5% of males list interest as a possible motivator.

What can be done?

Women degree applicants and enrolled students appear to be more sensitive to gender issues than their school girl counterparts in the surveys. They more accurately predict the proportion of women likely to be on degree courses and are more

likely to raise gender as something which they feel plays a part in their decision making.

Comments include perceptions of the discipline's masculinity, male domination in the profession, fears about discrimination in career progression and expectations of needing high level technical and mathematical skills.

When asked what could be done to improve applications from women there was an overwhelming response from schoolgirls, applicants and enrolled students that awareness of Product/Industrial Design should be raised among women in general and in schoolgirls in particular – the implication being that they are unaware of the option and/or have limited understanding of what the subject involves.

To this end the course at Leeds has begun to foster closer relationships with local schools. Over the last two years staff and students from the course have been involved in the following activities:

- illustrated talks to local school pupils
- involvement in HE awareness raising sessions and University open days
- students acting as non teaching assistants in design technology and art classes (along the lines of BP's Student as Tutors schemes)
- women only workshops for schoolgirls in the University design studios (with plans for Asian women's workshops in 1996/97)

In 1996/97 the course will also be participating in a pilot mentoring scheme whereby enrolled students will mentor individual school pupils from the local community. It is anticipated that schoolgirls can in this way experience positive role models to encourage their consideration of Product Design in the future.

While higher education certainly has a role to play in positive action to encourage women into the profession, it cannot work in isolation. Degree applicants and enrolled students themselves recognise the need for action across the board, including schools, FE, HE and the Product Design profession.

With communication and collaboration it should be possible to begin the process of changing women's attitudes and aspirations toward three dimensional design and product design in particular. Examples of collaborative positive action might include:

- developing **project work** designed to encourage active participation through, for example, explicitly addressing the human context, emphasising research and reflection
- increasing the diversity of **teaching staff** to provide role models and to lessen the perception of the discipline being a masculine arena
- specifically designing **publications** (as information and teaching resources) which present women product designers in a positive light and which encourage participation (following the example of the educational video produced by Lisa Slater, Skipton Girl's High School)
- offering promotional **talks/open days/visits** which link schools, further education, higher education and the profession and which highlight the contribution of women
- implementing **students as tutors schemes** providing positive role models, support, sharing of experiences and an insight into Product Design
- providing **women's workshops** to allow women to experience Product Design and design activity in a safe, focused atmosphere, gaining an insight and 'taste' for the discipline
- developing **mentoring partnerships** between schoolgirls, women in the

community, female design students and practising women designers which offer an understanding support and encouragement

- staging **exhibitions** of women's work, of products and design issues of particular relevance and interest to women – both as designers and as users

- developing **access courses**, particularly those aimed at women returners and career changes, as well as offering **continuing professional development courses** to support and encourage women practitioners to stay in the business

- organising and generating resources for **competitions and bursaries** (following the example of CSD's Anice Alexander Trust Fund) which promote and encourage women Product Designers

- active encouragement of **research activities** which explore gender issues in design, including women's participation, professional practice and design which embraces women's needs.

Obviously, gender is not the only imbalance evident in Product Design. Much of the above can be applied to the consideration of ethnicity, age, disability and social class. Without change Product Design education will be limited in its ability to make use of the tacit knowledge and life experiences that students bring with them and which form an integral part of any personal and professional development. Without change the design profession will be impoverished and runs the risk of failing to meet the rich diversity of needs that is present in the populations they serve.

Change, as always in these matters, may be slow in happening, but this should not deter all of us involved, at whatever level, in considering the issues and the implications of inaction.

References

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