

## Goldsmiths College, University of London

Goldsmiths has involvement in a wide range of teacher education courses, both at initial and continuing professional development levels. In the Design Studies department this includes four-year BA in Education courses for both potential primary and secondary teachers and a one-year PGCE secondary course. All courses are linked into the Department of Education Studies, tutors in Design Studies covering D&T subject study and curriculum application courses.

### □ The BA courses: linked work and specialist work

The BA courses (Primary BA (Ed.) in D&T with Computer Studies, and Secondary BA (Ed.) in D&T) recruit from a wide range of backgrounds. With its strong community education links, Goldsmiths has always been interested in encouraging mature students as well as those with more traditional qualifications such as A levels and one of the strengths of these courses is the broad and relevant expertise within the exciting mix of students on course. The two courses have many similar features and for much of the first two years of subject study the students are taught in one group. This is enriching for both groups and helps to build mutual respect for each other's skills in their specialist subject. Both years of the course are context led and students are required to look beyond the designing and making of artefacts. They research into and examine the issues of D&T activities and the contexts they follow include body adornment, storage, alternative energy, electrical and computer control.

Other parts of the two courses run separately. The primary students develop considerable skills in computing and the use of IT which has involved working in partnership with local industry as well as taught courses in computer applications and techniques. In the final two years of the course they study in more detail

approaches to taking D&T into the classroom, giving them the opportunity to apply their own knowledge in the production of teaching resource packs focusing on such topics as puppets, travel and computer control.

Students on the secondary route continue to develop their own skills as design and technologists into the third and fourth years of the course. This work allows students to develop expertise in areas of specific interest through individual choices of major projects. Studying the application of their subject into the curriculum is a thread that runs throughout the four years, studying general educational issues and linking their D&T understanding and capability with school-based work. An education report in the fourth year gives students the opportunity to bring the many threads of their subject and professional studies into a piece of work focusing on a specific area, such as teaching and learning, equal opportunities or assessment.

### □ Project example — Alternative energy

During the second year of the joint subject study, the students work together on the theme of alternative energy. This includes the study of a full range of non-fossil and non-nuclear energy sources and the transformation of such generated energy for useful purposes. Students undertake a self-selected special study resulting in a report and they design and make a working model of an alternative energy system.

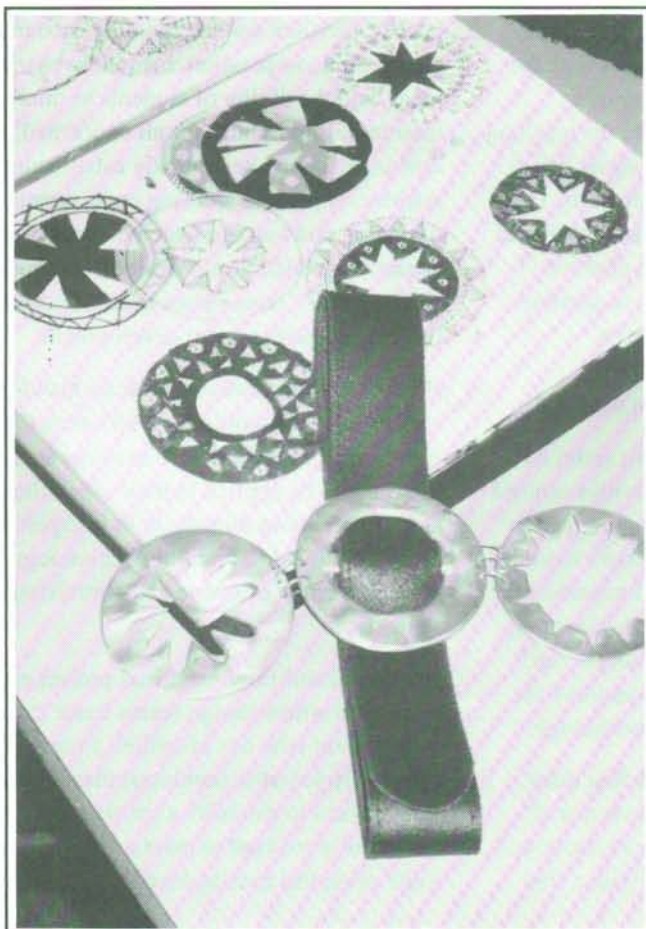
Student projects have included aero generators using cycle hub dynamos, passive solar systems, redesigning houses to capture and keep energy from the sun, active solar water heaters using hosing or piping in insulated glass-topped boxes, photovoltaic cell powered vehicles, wave and tide powered electricity generators and compost-heap heaters and generators.

A major concern of ours is to work in partnership with both internal and external agencies. This includes research projects within the department, the college and external partners. These partners help define the context of all the work, provide invaluable information resources, serve as clients for some of the student projects and quality assurance collaborators in planning, teaching and evaluation of the course.

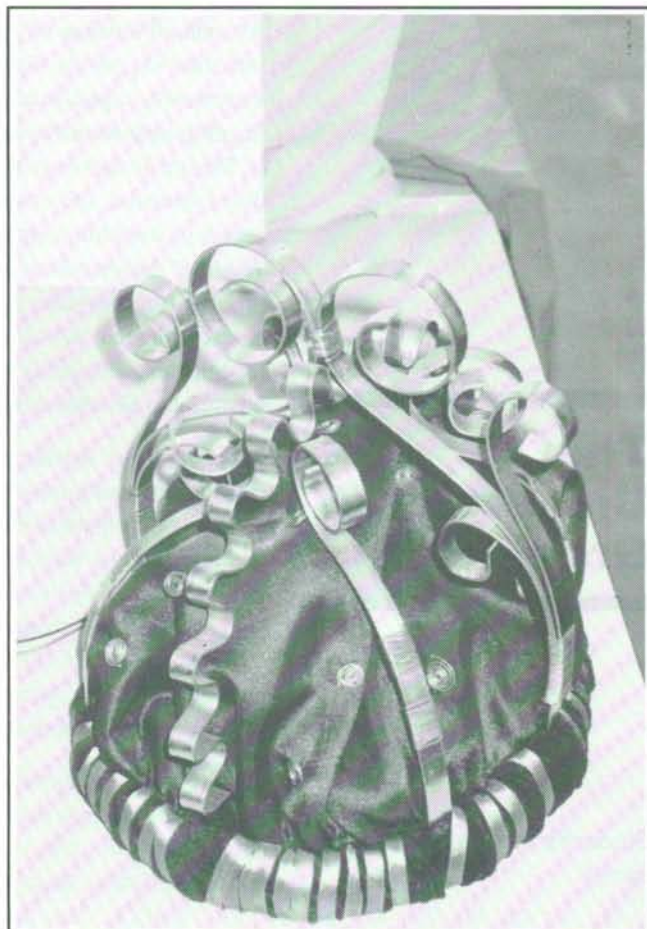


Two students working on an alternative energy project centred on the use of active solar water heaters





Two of the artefacts designed and made on the theme of body adornment



### □ The secondary PGCE course in Design & Technology

The PGCE programme recruits graduates from a wide variety of D&T related backgrounds. There are currently 28 students on course and it is run as a Teacher Training Partnership between Goldsmiths and fourteen schools in and around London.

College-based work concentrates on developing students' understanding of the educational context and expertise in the field of D&T. Experiences are designed to provide students with a wide variety of construction and control activities. Additionally students are required to engage in a design and make task. The project-based assignment undertaken by students on this year's course required them to design and make an artefact based around the theme of body adornment in the context of other times or cultures. Students were given freedom to generate and develop their design ideas using a variety of approaches and the outcomes from the activity were imaginative and of a very high standard, reflecting the expertise PGCE students bring to education from their degree courses and industrial/business experience.

The Design Studies department also runs an MA in Technology and Education and, through TERU (Technology Education Research Unit), an extensive portfolio of D&T and IT courses for the continuing professional development of primary and secondary teachers.

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