

The In-Service Needs of CDT Teachers in Bolton, Bury and Salford

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This report documents a survey into the INSET needs of some teachers in Bolton, Bury and Salford. It highlights the difference between the CDT needs of pupils which teachers identify and the CDT INSET demands from teachers. It also examines the pattern of course delivery and a range of alternatives to courses the CDT teachers are currently exploring.

Three schools in each LEA were asked to offer a cross section of CDT departments; the assistance of the head of the CDT department was gained by advisers. After an initial telephone contact, an introductory letter (3.4) was sent to each school along with a questionnaire (3.5) to be completed by the Head of Department and one other member of the department. The questionnaire was collected when the structured interview was conducted with both these staff on the school premises a few days after the questionnaire had been completed.

The questionnaire focused upon the specific needs of pupils following CDT courses in an attempt to establish a context of INSET NEEDS in schools.

The structured interview was designed to draw out the teachers' opinions on professional development to enable needs to be contrasted with wants.

18 staff were interviewed, 9 being the Head of Department or Head of Faculty of the relevant school.

18 responses were collected to the questionnaire, 2 questionnaires being completed by the whole department.

In view of the limited time available, only 9 schools could be visited and the limited nature of such a sample must be recognised. There were, however, remarkably few variations in response between schools or LEAs; where significant, these have been noted.

1.0 SUMMARY OF RESULTS

1.1 The majority of teachers interviewed perceived their pupils as having major problems in mastering basic design skills, yet few of their requests for INSET courses included training that would help them support their pupils struggling with this fundamental weakness.

1.2 There appears to be an urgent need for further CDT INSET across virtually all the departments interviewed as the vast majority of respondents felt their training was inadequate faced with the change required by CDT. Given the apparent breadth of this need and the teachers' concerns about the teaching of basic design skills, strategies that encourage a wider access to training should be considered.

1.3 The implementation of the 'GRIST INSET CYCLE' as a model for in-service training is poorly understood in CDT departments and will need considerable building of professional development skills at the departmental level if it is to be effectively implemented.

1.4 There were considerable misgivings about the CDT GCSEs and almost all the teachers interviewed felt that the training received so far was inadequate and of a poor standard.

1.5 The shortage of CDT supply cover was perceived as the major constraint on INSET organised during the school day and there was felt to be an increasing reluctance to attend twilight courses.

1.6 A number of Heads of Department were concerned that their role required them to bring about considerable change in the teaching strategies, yet they had little or no training in management skills. These concerns were particularly felt where there was a need to move from teaching in single material classrooms towards an integrated crafts foundation course.

1.7 The majority of those interviewed perceived themselves as struggling to bring about considerable change in their subject area with limited resources. They often felt isolated and sometimes inadequate to the task in hand. The support of a Curriculum Leader could have a considerable effect upon CDT staff in these schools.

1.8 A number of CDT INSET initiatives are now being planned in isolation throughout the Greater Manchester area. The lessons learnt and materials produced could have

a wider application if those involved had an opportunity to share experience through a co-operative arrangement.

2.0 RECOMMENDATIONS

CDT Subject Courses/Activities

2.1. Design Stimulation/Problem Solving:

Stimulating a good range of ideas from the pupils during the design process was seen as a problem area by 25% of those surveyed. A further 69% felt help would be useful. A similar pattern of concern emerges where pupils are asked to analyse or evaluate their work with 81% and 62% of the teachers regarding this as a problem area in an area where help would be of use.

No requests were made for support in these areas via the GRIST bids and some consideration should be given as to whether this is indicative of the problems associated with teachers' needs and their wants. It could also highlight the fact that many teachers have chosen courses from the range offered by providers rather than initiating their own training. Consideration could be given in LEAs to:

- a) giving careful subject guidance to staff involved in planning their own professional development;
- b) initiating a series of workshops/courses that offer support to teachers who are attempting to stimulate a wider range of design response and a more systematic development of 'designing';
- c) negotiate with providers to ensure that such areas are fully covered within the range of courses on offer.

2.2 GCSE

This is a crucial and consistently voiced concern. Teachers repeatedly requested actual demonstration of what is being achieved with pupils in other schools preparing for the examination. They further wanted to see examples of work marked so that standards were clearly demonstrated. The training received so far was strongly criticised and should be reviewed

before 'more of the same' is contemplated.

2.3 *Design Graphics*

Of the specific course requests, 27% were for Graphics with a good deal of interest shown in the airbrush and CAD. The initial questionnaire revealed that 75% of the teachers would like some help with the graphics in designing, but during the interview, it was apparent that some confusion existed between the generation and recording of ideas and presentation drawing techniques. Teachers felt a need for support in both areas but most courses appear to address only the latter.

Consideration could be given in LEAs to ensuring that graphics support is offered that links directly to the early stages of designing as well as courses that support Technical Graphics or Presentational Graphics.

2.4 *Technology*

Of the specific course requests, 31% were for some form of Technology, mostly based around electronics, yet the examination entries projected for 1989 indicate that only 4% of the entries will be for the CDT Design Technology, with a further 6% of pupils being entered for the Technology 'B' syllabus.

Hopefully, the interest in Technology INSET indicates that departments are preparing themselves for an expansion of this strand of CDT. None of the requested Technology courses had Design as a central course element and the Technology 'B' syllabus must be seen as an attractive option to those who feel concerned about their design teaching skills.

Consideration could be given to emphasising the 'Learning to do' rather than 'Learning through doing' in discussion with course providers. Courses that follow the full Design Technology framework could further be requested from providers.

2.5 *Departmental Planning Day*

A number of departments trying to bring about change saw this as an excellent aid to progress; many departments though would benefit

from support in planning for and following through on such a training initiative.

Consideration could be given in LEAs to requesting an outline training plan for the day, detailing the planned follow up and intended outcomes. Consultation and the attendance of the LEA's CDT Curriculum Leader may be advisable.

2.6 *Department Visit/Exchange*

This was often seen as a way of stimulating change within the department, particularly when the school visited was working within similar constraints yet achieving good results. Such visits need not take up a whole day or involve a whole department, but could be used to highlight a specific solution to a problem.

Consideration could be given in LEAs to the role of the CDT Curriculum Leader in improving the dissemination of good practice between schools and in following up school exchange visits.

2.7 *LEA CDT Conference/Workshops*

All the Heads of Department interviewed would welcome an opportunity to come together within a training context. With many of the areas of need being spread across all schools within an LEA, this offers an opportunity to imitate the cascade model of INSET through Heads of Department; specific short topics could be initiated with support materials worked through for the follow up back in school.

Consideration could be given in the LEAs to the role of the Head of Department as a leader of school based training and how this could be supported.

2.8 *Curriculum Leader/Teacher Adviser*

The move to a managed approach to in-service training will inevitably require a good deal of work across the LEA in developing an adequate range of INSET strategies and professional developmental skills. This work must be kept within the subject context if it is to be fully effective and the role of the CDT Curriculum Leader could be

important in ensuring that change permeates widely at classroom level. A number of departments would further welcome the regular support of a Curriculum Leader in bringing in new ideas and skills to the department.

Consideration could be given in the LEAs to the role of the Curriculum Leader in not only supporting CDT initiatives, but also in further supporting the implementation of the LEA's managed approach to INSET at the classroom level.

2.9 *Provider Initiated Courses*

A number of teachers felt they lacked adequate information about courses on offer, that communication with providers whilst department members were on courses was poor, and that often little feedback was given to the rest of the department by the returning course member. Little after-care is built into most courses and few have a formal evaluation strategy with defined outcomes.

Consideration could be given to LEAs to:

- a) discussing with providers the possibility of a detailed course outline for those intending to go on courses,
- b) including a requirement for course members to give a short report or presentation to others in the department;
- c) establishing a responsive framework for evaluation and communication between providers and LEA.
- d) establishing a course design framework that allows providers to offer after-care as part of this course package.

2.10 *CDT Professional Courses/Activities*

The likely introduction of appraisal, the development of GRIST and the change of subject skills required by GCSE have all imposed the need for a wider range of management skills on schools. The change imposed on CDT has however been greater than most, partly because of CDT's starting point and also partly because of the complex nature of CDT itself.

Many of the teachers interviewed were interested in building management skills within the department, and there was a concern that appraisal needed a CDT dimension.

Consideration could be given in LEAs to:

- a) encouraging CDT teachers to participate fully in the management training funded as a local priority under circular 6/86;
- b) ensuring the provision of a suitable range of short middle management courses that address the specific needs of departments rather than whole school needs;
- c) ensuring that models for appraisal or course evaluation recognise the CDT context.

2.11 Supply Cover

Many teachers felt the lack of adequate CDT supply cover was a major constraint on their INSET. Consideration could be given to the use of teachers from CDT Support Through change being used not only to cover for those on college short courses but also for the three weeks that then remain before the end of most school terms to enable specific school based initiatives to take place.

2.12 Co-ordination of LEA's CDT INSET

Each LEA has at present planned its own approach to CDT INSET and a range of initiatives are running to a large extent in isolation. It is likely that the materials produced and lessons learnt will have an application in other LEAs, possibly preventing duplication of effort or resources.

Consideration could be given to collaborating with others involved in CDT 'INSET' in the North West to enable:

- a) a conference/workshop to be held that would offer the forging of closer links, the dissemination of experience and cross LEA collaboration to be established.
- b) bids to be made for additional funding to support CDT INSET, which may be more successful if based upon a collaborative basis.

3.2. QUESTIONNAIRE RESPONSES

Q1: What parts of the CDT curriculum do you feel most need support and improvement?

- a) Persuading the pupils to carefully analyse the problems posed:

Satisfactory	6%
Some help/useful	33%
A problem area	50%
- b) Stimulating a good range of ideas from the pupils:

Satisfactory	6%
Some help/useful	69%
A problem area	25%
- c) The 'Design Graphics' stage of the design process:

Satisfactory	20%
Some help/useful	75%
A problem area	6%
- d) The quality of manipulative skills in realising design work:

Satisfactory	56%
Some help/useful	43%
A problem area	0%
- e) The satisfactory evaluation of their solutions:

Satisfactory	34%
Some help/useful	60%
A problem area	6%
- f) Combining CDT Technology and CDT Graphics work within the mainstream Design course for years 1-3:

Satisfactory	43%
Some help/useful	31%
A problem area	25%
- g) The CDT GCSE Exam Course in Design Realisation:

Satisfactory	25%
Some help/useful	45%
A problem area	20%
- h) The CDT GCSE Exam Course in Communication:

Satisfactory	20%
Some help/useful	50%
A problem area	20%
- i) The CDT GCSE Exam Course in Design Technology:

Satisfactory	8%
Some help/useful	46%
A problem area	46%

This part of the survey revealed a general concern for help with further training to support the CDT GCSE courses and a more specific need relating to aspects of

teaching the 'Design Process' to pupils. The interviews indicated that many staff were still in the process of moving from largely craft courses fully into the Design framework and felt the need for support during this period of change.

Q2: What courses would you like your LEA to provide to help meet your needs for in-service training?

Graphics, including Airbrush	7
Foundation Course Technology	2
Electronics for years 1-3	6
Foundation Course development	2
CDT GCSE Course development	5
Micro-electronics	2
Low Technology Projects	2
Exchange of ideas and comparisons of work	3
Computing/CAD	5
Model Making	3
Strategies for less able pupils	1
Total	38

Whilst the range of requests for courses covers almost the whole breadth of CDT, the most popular areas can be grouped into those that will support the change that GCSE is now bringing to departments, e.g. Graphics, the other main strand being 'New Technology', with requests for Micro-electronics, Electronics and Computing.

Rather surprisingly, few of the requests asked for courses to support the main areas that were identified as causing problems for pupils, e.g. Design Analysis, the generation of a wide range of ideas or the evaluation stage of designing.

Q3: Please indicate professional or managerial courses this department could benefit from:

The role of a Head of Department or Faculty	3
Records of achievement/profiling/assessment	2
Team work/management	2
Experiential learning	1
Curriculum development	1
Total	11

The necessity of team work and a more effective management of the CDT Department was further raised in the interview, where the required shift from a single material base to closer co-operation with subject colleagues was

seen as both a challenge and an opportunity needing further support.

3.3. Structured Interview Responses Context

To set the structured interview within its context, background information on each school's CDT Department was collected.

The average size of Department was 5 staff; all had frequent informal meetings to discuss CDT issues, but most found that teachers' action and a change in attitudes had reduced formal meetings to an average of 1 per term. The vast majority hoped to have completed the move from single material craft examinations to the CDT suffix exams by 1989. Examinations for 1988 were as follows:

19 groups	CDT Design Realisation
13 groups	CDT Design Communication
2 groups	CDT Design Technology
	(4% Total)
1 group	Design-Wood
1 group	Design-Metal
6 groups	Graphic Communication
3 groups	Technology 'B'
	(6% Total)
1 group	Engineering M.W.
2 groups	Building Studies
48 TOTAL	

Q1a: What is your main problem area in teaching the CDT Design course to pupils in years 1 to 3?

The early stages of 'problem posing and solving' were frequently raised; pupils often saw this as an annoying chore before craft work started. Limitations imposed by single material rooms and a general lack of resources not surprisingly were also raised. A shortage of suitable projects or starting points for briefs was frequently raised. Poor links between Art courses and Design courses were commented upon as joint project work was seen as one possible solution to squeezed timetables in years 1 to 3, yet it was felt that pupils rarely brought their creative/artistic skills into CDT and vice versa.

Q1b: What is your single most urgent concern in teaching the GCSE courses?

Lack of adequate training, both in the specific GCSE cascade and in 'Design' in general was mentioned by almost all respondents. A number of schools were

concerned that poor ability students would find GCSE courses too difficult.

Q2b: Have you had any information on a change in the way that INSET is to be organised?

Schools in Bolton were generally more aware that new patterns of organisation and management for INSET were about to come into operation, but only three of the CDT staff interviewed had more than a superficial level of knowledge on what these changes meant for them as an individual or department.

Q2b: Have you made any requests for INSET under the new arrangements?

Q2c: What were they?

All the departments bar one had made recent requests for INSET. The majority were for short skills courses in Graphics/Modelling, Computer Control, Electronics, Technology and Computer Graphics.

A number of more innovatory requests had been made by two of Bolton's departments; they were for:

1. A week's teacher exchange between a CDT teacher and a lecturer teaching on the Foundation Course at Bolton College. This was to be followed up by a briefing given to other department members.
2. Two days for the whole department to come together to plan a new foundation course linking what are at present separate CDT subject areas.

Interestingly again, the areas listed as problems in schools don't feature in the courses asked for.

Q2d: How do you go about deciding what courses should be on offer?

The teachers in Bolton schools had all held informal departmental gatherings to list courses they felt interested in. Two of these departments then had these prioritised by the Head of Faculty, whilst the third adopted a common course for all the department. Elsewhere, teachers had usually chosen a course they felt interested in the most. Little evidence of a formal structure to review the needs of the department could be found.

Q2e: What are the most important factors that help you decide if you will attend an INSET course?

The lack of CDT supply cover was a major restraint on many teachers wishing to leave school to follow a course yet maintain a continuity of lessons for pupils. Courses were further required to be set directly within the classroom context having a relevance to the pupils, teacher or department. A number of complaints were made about course quality; there was a feeling this applied particularly to courses run by other teachers at the end of a days' teaching. Two departments commented upon the poor level of information given about many courses; they felt this made an informed choice difficult.

Q2f: With the reduced possibility of long-term secondments, how would you rate the popularity of each of the following patterns of course organisation?

f1: Half day per week for one term?

Finding cover for any group on the timetable at this point was seen as the only problem for ½ day or even a regular day out. Two departments felt that the timetable could be re-arranged, given adequate warning, to avoid this problem. All felt that if teaching wasn't disrupted, this was an attractive form of INSET.

f2: Weekend course/conference?

Almost all the teachers found this the least attractive option as they felt reluctant to lose this time with their families.

f3: Evening courses?

Most of those interviewed remarked upon feeling tired and lacking concentration after a full days work in school and twilight courses were seen as a definite second best.

f4: Three day block at the end of the summer term?

If the continuity of teaching for any remaining classes could be maintained, this was felt to be ideal. Two teachers said they would further be prepared to work into the evening to extract the maximum from such an opportunity. No criticism was found of such a block and a number thought this would be a logical use of the in-service time the new conditions of service would impose.

Q2g: Have you considered alternatives to courses as a form of INSET?

g1: Visiting other departments where problem areas are being tackled with success?

This was a popular option for almost all those interviewed. The frequent proviso was that the school visited should be working under similar constraints and not be a showpiece. Concerns were raised again about cover during such an absence.

g2: A whole department off timetable to tackle a specific problem?

Given adequate cover, this would be seen as a great help by many departments, particularly those attempting to develop a more unified approach to foundation courses.

g3: An LEA conference/workshop for CDT Heads of Department?

It was felt that this could be useful as long as there was a direct link with the problems in individual CDT departments. Relevance should be placed high on the agenda and didactic approaches reduced to a minimum.

Q2h: Do you feel any of the following would help you bring change into the department:

h1: An LEA CDT Curriculum Leader/Teacher Adviser making regular visits to your school?

This possibility was welcomed widely during the interview, though almost all felt that the quality of the person chosen was crucial. To be effective, such a person was expected to be sensitive and supportive, having had experience in a similar school and with a realistic idea of what could be achieved. Two schools felt that it would be important for such a person to work alongside staff to develop credibility and to enable skills to be shared. One school saw the effect of school experiences being shared, with the adviser as an intermediary, being very helpful.

h2: Improved resources linked to INSET?

Only one school objected to such a concept whilst others accepted that a 'contract' to deliver change from the teacher should balance fairly with the resources necessary to implement that change. The majority of Heads of Department thought felt that they could usually acquire the necessary resources for most minor development from their Headteachers.

h3: Course tutors from colleges following up courses back in school?

It was felt that this could be helpful to most schools but would probably be far more help to the colleges in helping to bring about a more realistic insight into what is required by schools.

Communications between schools and CDT departments in colleges was remarked upon as poor by three schools. Two schools felt that where staff go on courses to colleges, some feedback to the whole department should be built into the course programme and be supported by the college.

h4: The Introduction of teacher appraisal?

Surprisingly, no objections were raised against the introduction of teacher appraisal and a number of departments welcomed this development as they felt it would help bring about change in the department. Concerns were raised about an adequate level of skills in senior staff who may be involved in appraisal work, and there was a particular concern that CDT, as a curriculum area, worked within a context that senior staff would need to understand. The adviser/curriculum leader was seen as having a useful part to play in implementing appraisal. Salford have introduced a system of appraisal, but this has not, as yet, made a great deal of impact upon those departments interviewed.

Q3a: Have you been on any courses yourself recently?

The vast majority of staff had been on some form of CDT INSET over the previous 12 months.

Q3b: Were you able to bring about any significant change within the department following the course? Approximately half of those interviewed felt that change had been introduced as a direct result of having gone on a course. Change mentioned included the introduction of an integrated foundation course, an improved range of Technology projects and the re-organisation of workshops along multi-material lines.

Q3c: What was your main problem in bringing about that change?

The problems faced where single material rooms had to be used as a base for CDT work were raised twice along with a shortage of resources and, in two cases, inadequate staffing to introduce Technology work more widely into the courses. One Head of Department felt eager to introduce further change in the department, but the crafts-trained staff still lacked a real commitment to CDT and he felt somewhat isolated.

Q4a: Is there a school INSET Co-ordinator?

Frequently, after some hesitation, every CDT Department bar one was aware of the INSET Co-ordinator, although a number were uncertain about what the role and responsibilities of the Co-ordinator should be.

Q4b: has the Co-ordinator helped with planning your INSET?

In one department, the Head of the CDT Faculty was also the INSET Co-ordinator, and had consequently been fully involved in the department's INSET plans. Elsewhere, only one other department had received some help when the Co-ordinator had passed on CDT course information, otherwise no help or guidance had been given from school INSET Co-ordinators to the CDT departments. In two schools, I was told that the Co-ordinator had a number of other school responsibilities and would have little time to offer guidance to an individual department.