

Chapter 9.

Key Factors in Developing Student C&IT Induction

Our case studies provide valuable narratives of the development process, and enable us to suggest some of the factors which are important in fostering development of C&IT induction activity. The factors identified are:

- i. Perspective
- ii. Support
- iii. Consonance
- iv. Linkage
- v. Structural Clarity
- vi. Differentiation
- vii. Value-attribution
- viii. Resource allocation

These factors are discussed briefly below.

i. Perspective

When C&IT literacy is not viewed as significant at management levels within the institution, it is likely that development will be limited to localised *ad hoc* activity, most likely dependent upon enthusiastic individuals within individual departments. Once perceived as significant, C&IT literacy development enters the area of policy formation: it becomes part of the strategic process, and a level of resources can be allocated to it. Views of the nature of C&IT literacy and its relationship to the curriculum and the learning process will shape the way in which C&IT literacy programmes develop within the institution, and way in which resources are deployed in its support.

Questions which might be asked here are:

What is the perspective on student C&IT literacy at various levels of the institution?

How are they shaping the way in which provision is made for student C&IT literacy?

ii. Support

Support refers to the extent to which key stakeholders underwrite student C&IT literacy provision. Support is important at various levels: central management; faculty/division/school management; departmental management; individual staff; and individual students. It can take a number of forms of action: encouragement, demand, location in strategic plans, expression in documentation (e.g. publicity materials), or the allocation of resources, ranging from the few pounds which a student might pay as a fee for an optional computer course to the tens of thousands which might be required to support a central C&IT induction programme.

Questions which might be asked here are:

At which levels is support for student C&IT induction evident?

What forms does this support take?

iii. Consonance

Consonance refers to the extent to which developments proposed or enacted are in accord with the perspectives of stakeholders. The notion of strategic terrain is important in this respect, since proposals, which run counter to the strategic trends within the organisation, are unlikely to receive much support. It is therefore important for enthusiasts or champions to propose developments which will sit well with the direction in which the institution is moving. It is also important that proposals or activities sit well with the views of the students at whom they are aimed. It is unlikely for instance that proposals which envisage students themselves paying for courses will find wide takeup.

Questions which might be asked here are:

Does this proposal or activity sit well with institutional strategy?

Does this proposal or activity sit well with views of stakeholders at all levels?

iv. Linkage

Linkage refers to the extent to which student C&IT literacy provision is linked to or embedded within core learning activities and support. Linkage may be:

- i. with the *curriculum*: either through embedding of C&IT induction into, or integrating of C&IT induction with, subject-based studies (including modules focused upon the use of C&IT within a particular subject); or through setting up of curricular units focused on generic skills (e.g. study skills) or on C&IT skills.
- ii. with *pedagogy*: through the construction of C&IT induction activities specifically to support the learning activities which are current or which are anticipated to become current within the institution or substantial parts of it (for instance the training of students to effectively use a particular virtual learning environment which has been adopted for use throughout the institution).
- iii. with *support facilities*: through the development of C&IT induction in line with the C&IT infrastructure (network, hardware and software, including applications software), the library facilities, student support facilities (including support for disabled students and for those requiring remedial key skills or study skills support), or provision by other agencies such as the Careers Service.

Successful linkage will involve personnel from appropriate agencies from within the institution, e.g. from academic departments for curricular linkage, from pedagogical units (such as Learning and Teaching Units) for pedagogical linkage, and from support departments (such as Computing/IT Services, Library, Student Support Service) for support linkage. Linkage is not necessarily restricted to one form, and more than one type may be found within the same institution.

Questions which might be asked here are:

How is student C&IT induction related to curriculum, pedagogy and support facilities?

v. Structural Clarity

Structural clarity refers to the extent to which structural elements are made clear and unambiguous. Structural elements would include such items as: goals of a student C&IT induction programme; course structure; level(s) of achievement required (e.g. to attain a baseline skills threshold); initiative/autonomy allowed to the programme (and its leader); line management of the programme; and funding commitment. Lack of clarity will lead to uncertainty over the institutional commitment to the programme, and a sense that the programme is temporary or peripheral.

Questions which might be asked here are:

How clear are the structural elements of the programme?

How clear is the programme's institutional context?

vi. Differentiation

Differentiation refers to the extent to which programmes address elements of variability within the student body. Elements of variability could include: level of IT skill on entry; course/subject focus; disability; cultural background; and economic background.

Provision for differentiation might include:

Area of Differentiation	Appropriate aspect aspect of provision
level of IT skill on entry	Provide needs analysis on entry Offer range of delivery modes Offer a range of courses Provide quick-test or exemption procedure Offer remedial provision Offer courses in secondary schools
course/subject focus	Set up embedded or customised courses Appoint tutors from appropriate subject areas Arrange delivery in departmental clusters
disability	Provide support software Offer some courses in disability-supportive clusters
cultural background	Offer second-language versions of courses Offer gender-specific courses
economic background	Make available IT facilities for online use and practice Offer special courses for those on access programmes

Questions which might be asked here are:

To what extent is the student body differentiated on arrival in respect of C&IT skills?

What appropriate measures may be developed in response to this?

vii. Value-attribution

Value-attribution refers to the extent to which achievements in a student C&IT literacy programme can be recorded in a manner usable in other contexts, within and outwith

higher education. There are two key aspects of this type of value-attribution: accreditation, credit transfer and certification. The first enables achievements on a C&IT induction programme to make a contribution to final degree results. The second enables degree-earning points to be transferred to another institution, and the third ensures portability of a qualification even if it is not accredited for degree-awarding purposes (provided the certification awarded is recognised widely enough).

Questions which might be asked here are:

Is the programme credit-bearing?

If so, can credit be translated into recognised transfer points?

Is the programme linked to a certification scheme that is recognised by other institutions and by employers (if appropriate)?

viii. Resource allocation

Resource-allocation refers to the extent to which resources allocated to a student C&IT literacy programme place limitations upon the development and implementation of the programme as stated in its goals. The amount of resources allocated will clearly determine the extent to which the programme may achieve its goals. However, its success will also be affected by the way in which resources are distributed. Thus, appointing a full-time tutor may be a much less effective way of meeting student demand for courses than the appointment of several part-time tutors, so that there is multiple tutor coverage at times of high demand.

Questions which might be asked here are:

Is the amount of resource allocated to the programme adequate?

Is the manner in which it is deployed appropriate?

Conclusion

We have only explored the factors which affect the success of student C&IT induction very briefly. This approach will be further developed in the second phase of the project, at the end of which a more detailed discussion will be offered.