Dublin Institute of Technology
ARROW@DIT

Conference papers

School of Electrical and Electronic Engineering

2004-06-01

Staff mentoring at DIT - A review of four programmes

Leslie Shoemaker
Dublin Institute of Technology

Follow this and additional works at: http://arrow.dit.ie/engscheleart

Part of the Education Commons

Recommended Citation
Shoemaker, Leslie : Staff mentoring at DIT - A review of four programmes. Level3, Issue 2, June 2004.

This Article is brought to you for free and open access by the School of Electrical and Electronic Engineering at ARROW@DIT. It has been accepted for inclusion in Conference papers by an authorized administrator of ARROW@DIT. For more information, please contact yvonne.desmond@dit.ie, arrow.admin@dit.ie.

This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License

Staff mentoring at DIT: A review of four programmes

Introduction

Staff Mentoring at the Dublin Institute of Technology is quite ambiguous in terms of its definition and purpose, as well as the impact it has with retention issues. The purpose of this paper is to provide a research review regarding the profile of the typical first-year student as well as to compare four current staff-mentoring programmes in DIT Kevin Street.

For the purpose of this paper, a staff mentor is defined as an individual who meets the following criteria:

- he/she has been appointed to this position by his/her department;
- their role is to provide 'support' to first year students – this can include information regarding class/lab changes, referrals to other DIT services, information regarding attendance and/or marks, etc.
- the student population is aware of this individual and of the role he/she serves.

It was difficult to create a broad definition for staff mentor because this particular terminology is not endorsed by DIT: other titles such as tutor, mentor and adviser are utilised in separate departments and schools. As a result, there often appears to be much confusion about the exact role these staff members serve and how each person is meant to implement their identified tasks. In part this situation is a consequence of the lack of DIT policy regarding the position and its expectations. It also reflects the individual nature reflected in each DIT site, the six different faculties, departments and even in specific courses.

Research review

Students entering third-level education arrive from a sheltered educational environment where they are restricted in their choices and learning, and in a sense this reinforces their skills at an adolescent and immature level. Instead, in third-level education, students are invited to learn independently, to communicate and critically evaluate throughout their length of stay. This is a major academic and personal transition within the life of a student (Cottrell, 1999). Additionally, when arriving at third-level education, the individual will for the first time be faced with other demands, such as rent, course fees, living and social expenses, as well as related academic costs. This step into independent living can be frightening and overwhelming for the inexperienced young adult.

It has been recognised that the 'non-academic' (i.e. social, personal and psychological) needs of third-level students have often been overlooked and/or unrecognised by the staff with whom have direct contact (*Irish Independent*, 21 April 2002, 6 January 2003). Yet it is

© Leslie Shoemaker, Dublin Institute of Technology

these issues that can have a *significant impact* on the learner's academic success, completion of a course as well as a successful transition to the workforce (Gibbs, Graham et al. 2000). During 2001–2, Frank Costello, DIT's Retention Officer, implemented a survey to first-year students which focused on their experiences up to that point. He evaluated the responses of 1,356 students across 43 courses, which represented all six faculties throughout DIT. His research identifies four types of students in first year:

- the at-risk student;
- the struggler;
- the average student, and
- the confident student.

The needs identified for the first two types of student relate to many personal-identity issues such as confidence, career choice, and course choice. Academic issues pertaining to study skills relate to the first three categories of DIT students.

Based on the results of Mr. Costello's survey, further psychological research was reviewed with the intention of addressing the variety of issues, both personal and developmental, that are presented by the student population having reached third-level education (Malin & Birch, 1998). The general age of full-time students at DIT is between 18 and 22 years of age. This age group corresponds with Erikson's *adolescent* and *young adult* stages in his theory of psychological development. From this theory, two distinct target areas of psychological, personal and social needs are highlighted, focusing on the development of individual identity and relationships to others.

Using Erikson's theory, supported by the results of the Costello survey, a clearer picture of the needs of DIT students has emerged. Students entering third-level education are in the midst of the *adolescent* stage, which is characterised by identity versus role-confusion conflict. At this stage in any individual's development, the person is searching and struggling for his/her identity in regards to self, occupation, sex role, politics as well as religion. This can be a very challenging experience for the student, now faced with the prospect of forging new relationships, negotiating a new academic and possible living environment. In addition, they are further faced with the prospect of presenting their independent self to the world without not necessarily knowing *who* they are, *what* they believe, *what* they think, and *what* they want/need. This can feel very confusing and threatening to a newborn adult. This sense of concern about the new arrivals has been identified also in the Costello survey, most prominently with the struggler and at risk students.

In creating a formal staff-mentoring programme, the aim is for it to become a seamless part of the college, departmental and course networks that support new students as well as for the other 'established' student groups. This provision would be extended through the many transitions that the students, in particular the first years and other newcomers, are currently

facing, thus assisting the at-risk and struggling students into becoming the average or confident students. The programme is meant to provide appropriate individual and 'hands-on' attention, as well as guidance and/or referrals to other agencies within DIT that this transition may require. The successful completion of this stage will affect course satisfaction, healthy relationships, psychological well being and social involvement which is linked to a positive outcome of the student in terms of commitment and endurance.

Another phase of development is *young adulthood*, characterised by the conflict of intimacy versus isolation in which the young adult must develop intimate relationships with others in order to proceed successfully in the next life stage. Once again, stepping out as an independent adult is the challenge of this particular age group. The individual on his/her own may not have the skills to make this transitional step. This may be observed in incidences of bullying, scape-goating, social isolation, difficulty in performing any activities whether social or academic when the spotlight is on them, further illustrated by Costello's research. The successful completion of this stage will affect psychological well being, relationships within the college, communication needs, responsibility for self and social activity. All of this will prepare the individual for entering the workplace. Another psychological concept that applies to a staff-mentoring programme is based upon the theoretical model of modelling. Modelling is otherwise known as observational (social) learning, and the basis of this theory is that learning can occur through the process of observing someone else's activity; therefore the application of consequences is not necessary for learning to take place (Huitt and Hummel, 1997). This type of teaching technique has been formally and successfully applied to many educational situations in Ireland and abroad (Ehly and Topping, 1998, p. 27; Adelgais, King and Staffieri, 1998, p. 134). In Trinity College Dublin, Dublin City University and DIT the concept of peers helping peers has been translated into peer-counselling and peer-mentoring programmes (Keane and Kennedy, 2002). The commerce department at University College Dublin, and the faculty of engineering at DIT have successfully imbedded peer-assisted learning into the curriculum with positive results, as reported by both staff and students at both institutions (Costello and Russell, 2003).

The concept also naturally applies to student- and staff-mentoring programmes where students would be able to learn appropriate behaviour/skills through the observation of the appointed staff mentor(s). In a sense, this relationship loosely parallels a parent–child one. I believe this is especially true since first-year students are entering a new environment that as a whole does not offer much 'safety' since it is unfamiliar and requires moving from a restrictive educational model to one that is characterised by independent learning. This, as has already been mentioned, can be quite overwhelming for an adolescent. If a relationship with a staff member can be facilitated, then safety of some degree can be created thus providing a student with an important 'safe base' during the first few months of a difficult transition period. This safe base can be further enhanced by providing a forum for first year

students to regularly meet second, third and fourth year students, as has been done with the group-adviser programme that has been imbedded in the academic development and key skills module in DIT's electricial services engineering course for technicians (DT244) as well as with Frank Costello's pilot mentoring project in the faculty of engineering.

Methodology

Below is information regarding four programmes which has been obtained from meetings with individuals involved with the identified programmes. The following is a discussion of four courses that are currently implementing staff-mentoring programmes.

Degree in electrical and control systems engineering (FT009)
(intake of first years students = 38)

At the start of the 2003–4 academic year, Dr Cecilia Chan joined the school of Control Systems and Electrical Engineering. Her newly created role is intended to be divided between mentoring (4 hours/week) and lecturing (12 hours/week) and has incorporated the following:

- provides individual tutorials when necessary to address academic weaknesses;
- monitors attendance as well as marks – she will contact students who have been excessively absent and/or have low marks, in order to assess the difficulties;
- gathers information from students identifying their engineering and computer knowledge as well as their interests and personal information (i.e. email address, residence, mobile number, etc).
- establishes an individual relationship with each student by developing a sense of trust and friendship. As part of this she meets students individually, even if only for a couple of minutes at the end of class. If Dr Chan is unable to provide assistance, she will refer the student to an individual who can.

It seems that this approach has been effective since only three students have formally withdrawn from FT009, and the average reported class attendance is well over 50%. This is a dramatic improvement over the prior year where almost 70% of the first-year students did not proceed into the second year of the course.

Dr Chan explains that she has been conscious to address not only the academic elements but also the 'human' components. As she has noted, learning should be fun and this can be achieved by:

- encouraging students to organise and/or participate in social event since this helps them to 'feel' a part of something and this develops group cohesion;
- nominating class representatives in each class and allocating responsibilities to them;

- calling on students for answers and creating an environment where students can learn by association (i.e. stories, analogies, and so on);
- creating motivation by creating assignments that include targets and rewards, as well as by exhibiting enthusiasm with students;
- demonstrating tolerance to aid students in moving from a rigid course ethic to a more flexible medium for learning.

Dr Chan maintains that her student-retention programme does not ensure that the 35 students currently registered for exams will progress to second year, but her programme, in her opinion, is at least a pre-emptive and dynamic move to retain student numbers**.** It is also her belief that this is not a job for one person, and it is of utmost importance that the programme ethos should be adopted at school level by all lecturing staff.

Certificate/diploma in electrical services engineering (DT244)
(intake of first years students = 48)

This four-year-old certificate/diploma programme has been quite innovative in course design and implementation. The primary focus has been holistic in that the 'whole' needs of the students are being addressed. This has been achieved by several methods but two specific areas relate to the concept of mentoring.

1. Three staff members have been assigned the role of advising the first-year students, and one further staff member is the first year coordinator. These staff have been selected because they have at least weekly class and/or lab contact with the first-year students. There are also advisers assigned to the second- and third-year student groups.
2. In 2000, this course implemented a new two-year module, academic development and key skills, designed and is managed by a psychologist. This module responds to the need of students as identified from self-reports, survey results and psychological research. Programmes such as this have been established in the UK and US, and research supports the validity of these projects (Gibbs, Graham et. al. , 2000). In addition, a group-advising programme between the first and second year students exists within this module. Both groups of students share a class at least twice a month during the academic year.

Even though the school of Control Systems and Electrical Engineering has been able to establish successfully a student-centred ethos, no formal staff-mentoring programme had been developed. Recently, retention problems have arisen. As part of the solution, a new post of student retention officer (SRO) was created in December 2003. Two hours per week have been allocated to this post and the current responsibilities are as follows:

- initiates contact with students who have been identified as having difficulties (i.e. reports from lecturers or poor marks and/or attendance) and meets with them to review situation and options; will meet with staff and students at their request (these responsibilities are shared with the year coordinator);
- mentors students with identified difficulties such as dyslexia, and liaises with the disabilities officer/staff to provide assistance (this contact continues throughout the student's time in this course);
- in case of illness leading to absence, DT244 students submit medical certificates to the SRO who notifies and/or liaises with the appropriate staff about the certified absence;
- initiates contact with staff about outstanding attendance and/or marks or specific difficulties with a student;
- attends the course committee meeting each term;
- provides updates to the department head and year coordinator;
- facilitates the selection of student representatives for each year of DT244 and allocates responsibilities to them;
- identifies and prepares students for roles such as demonstrators on information days;
- notifies students of exam registration;
- makes referrals to the appropriate DIT student services, and maintains contact with these services when appropriate;
- In 2004–5, the SRO will be involved with induction and is assisting with the development of a new students intake form. In addition, the SRO and the year coordinator will meet with each student during the first term to review progress, and so on.

It is too early to determine the full impact this role has had with the current first year students but initial feedback from staff and students has been quite positive. Currently there are **27** students registered for exams. Two students have deferred for medical reasons, four have left the course to follow electrician apprenticeships, one student recently left to begin a motor-mechanic apprenticeship, and four have left to pursue other academic courses such as nursing and graphic design. It is unknown why the remaining 10 students departed since they have not responded to correspondence or phone calls about this matter. Obviously this is a situation that will warrant further evaluation over the next couple of years to determine the effectiveness of this role in regards to the transition issues for first-year students and retention, as well as to develop this position to its full potential.

Diploma in applied science (DT 273/1)
(intake of first years students = 86)

This science course rotates the role of staff coordinator for first-year students between the schools of chemistry, biology and physics every couple of years. Recently staff from chemistry have assumed this role and its associated tasks, although this job with be passed on to biology or physics in the coming academic year until the next rotation. The staff coordinator's tasks have been divided into three areas – induction, student/staff contact and record keeping:

Induction

- meets the students at induction on two separate occasions – the first is while the students have been separated into three smaller groups and the second is when the students are together in one group;
- assists students in completing the course intake form during induction, as well as provides all students with a 'Welcome Pack' that reviews the methods of information dissemination as well as expectations for the first year of applied science.

Student contact

- prior to induction, the staff coordinators respond to queries from potential students and parents;
- in 2003–4, an hour-long study-skills workshop was provided, in conjunction with the professional skills lecturer in October 2003;
- provides all lecturing staff with updated attendance sheets as well as details regarding certified absences;
- contacts and, if need be, meets students in relation to difficulties with attendance and/or marks, or facilitates lab group changes;
- assists with the organisation of the summer and supplemental exam boards (i.e. obtains all course-related marks, prepares Excel spread sheets with relevant data, notifies staff of exam-board meetings, etc.);
- makes referrals to the appropriate DIT student services and meets with support services when necessary;
- in November and January, the coordinators review progress with all students who are repeating either the entire year or just specific subjects;
- in December, the coordinators meet with any first-year students who have been identified as 'at risk' based upon attendance and/or marks;
- the coordinators facilitate meetings during the year with all first-year staff and selected first year-students to discuss the course, possible difficulties and potential solutions (it should be noted that this type of contact is not restricted to these formal meetings for either staff or students experiencing problems);
- responds to contact from students, staff and parents during the year (i.e. complaints, course changes, and so on);

- participates with course recruitment activities (i.e. open day, school contacts, visits from prospective students, and so on);
- notifies students of exam registration;
- assists with the selection of non-standard and mature applicants.

Record keeping

- creates and maintains files on each student;
- monitors and records attendance for all classes and labs in a central database;
- creates lab groups (the students' travel distance in the morning is taken into consideration since attendance to labs is mandatory);
- maintains and updates the course notice board in the college as well as on the course web site;
- compiles annual statistics (i.e. pass/fail rate, withdrawals, etc.) for the course committee.

The consensus with all involved with the first year of this course is that the coordinators serve an important and valuable role for first-year students in their transition to third-level education, thus assisting in reducing retention difficulties. At the time of this report, approximately seventy-five students took their pre-Christmas exams and **74** have registered for the upcoming exams.

Degree in computer science (FT 228/1)
(intake of first years students = 80)

This well established programme has clearly not experienced a decrease in student interest as have other third-level computer-science programmes in Ireland. Still, only one member of staff has been allocated to the role of year mentor/coordinator, and is provided with the time allocation of one hour per week to carry out these duties. Since the staff mentor's duties are numerous, they have again been divided into the categories induction, student contact, and record keeping.

Induction

- meet the incoming students at induction and provide an overview of the course;
- give a tour of Kevin Street to the entire group;
- provide any course/college related documentation that the students may require;

Student/staff contact

- during the first term the year mentor/coordinator arranges the staff/student meetings;

- during the year, the year mentor/coordinator meets students, at his or their request, to discuss problems such as late course work, poor marks, and concerns about course choice, etc.
- makes referrals to the appropriate DIT student services;
- responds to phone calls and emails from parents, staff and students on issues related to the course;
- writes references upon request (including letters for potential employers, landlords and immigration);
- advises students, via a course web page, of any timetable, course or lab group changes;
- provides students with an exam schedule for all subjects as well as notice about when to register for exams;
- after the exam board, the year mentor/coordinator has to inform any student who has failed a specific continual assessment(s) how he/she can apply for a re-sit. This contact is completed via correspondence and the year mentor/coordinator must maintain on-going contact with the appropriate members of staff about the status of each student's summer re-sit.

Record keeping

- creates an Excel file on each student that tracks attendance as well as assignment and exam marks, and is given to all course staff;
- monitors attendance and marks;
- manages all medical certificates for the first-year students and notifies appropriate staff about certified absences;
- collates all the marks (assignment work and exam scores) for the entire first-year group and presents this information at the relevant meetings;
- arranges and manages all lab groups, and advises the students and staff about these arrangements;
- distributes all final records regarding marks (assignments and exams) for all first year students to the examinations office, the head of the department as well as the overall head of the course.

Although the duties are varied and obviously quite time-consuming and demanding, it is the opinion of the year mentor/coordinator that this position, overall, has had a positive effect on retention of first year students. Currently, **62** students have enrolled for exams.

Conclusion

DIT as a whole needs further to review staff mentoring in light of the increased competition among third-level institutions and the on- going first year student retention difficulties. In the past, student retention and the needs of first-year students have been two areas that have received sporadic attention and inconsistent funding, even though these two areas have the potential to have a significant impact for this institution. The following are my recommendations:

1. A policy regarding formal and on-going staff-mentoring programmes (i.e. the role, expectations, etc.) should be developed and implemented at DIT. A uniform job description clearly defining the expected tasks should be developed as part of this, since it is clear that there is quite a bit of disparity in current programmes.
2. Staff mentors should be provided with the necessary support (i.e. reduction in teaching hours, financial support, on-going training, etc.) to execute their role.
3. Establish one agency within DIT to provide information, support and accountability for the programme. It will be important for these staff members to have a form of support and information since they may be faced with the occasional difficult experience.
4. A DIT staff mentoring handbook, with associated training, should be developed.
5. Staff mentors should meet together at least once a year to discuss progress, difficulties, solutions, etc. In addition, this has the potential to serve as another form of support.
6. Staff mentors should be represented at the appropriate DIT meetings.
7. Continuing professional training should occur at least once a year to assist the appointed individuals in maintaining and acquiring new and related skills.
8. Assessment of the programme should occur annually (the Q5, Q6 and Q7).

© Leslie Shoemaker, Dublin Institute of Technology