Exploring the Potential for Technology to Enhance the Operation of Student Support Centres

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ABSTRACT

Business students' difficulties in studying accounting are well documented. Support centres offer a route towards overcoming these difficulties but barriers to their effective operation exist. The aim of this paper is to explore the potential for technology – specifically the use of discussion boards – to enhance the operation of student support centres. Using data collected via student questionnaires, lecturer interviews and online usage records, the paper examines responses to both 'face-to-face' and online support in the case of one accounting support centre. The findings show that in general the Centre is positively perceived and that initial barriers are being overcome through the use of technology. Some student groups however were reluctant to engage with the Centre and lecturers were also more hesitant to participate than anticipated. The paper concludes that methods of addressing concerns are needed if the potential for technology to enhance supports is to be fully realised.

Key Words: support centres; accounting education; technology

INTRODUCTION

Accounting is taught on a variety of business courses, including general business programmes, specialist accounting programmes and programmes in which business is a minor component. Existing research and anecdotal evidence suggests that for many students their experience of accounting and finance subjects is negative rather than rewarding (Geiger and Ogilby, 2000; Lucas and Meyer, 2005; Mladenovic, 2000). Supports centres, such as those evident in mathematics, offer a route to addressing these difficulties, but there are barriers to their effective use. Such barriers include, but are not limited to,

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lack of student awareness and perceived inaccessibility. One option to overcoming such barriers is to enhance support centres using technology. While technology has been used successfully as a teaching and learning resource within accounting education generally, there remains a need for a greater exploration of its potential to enhance the operation of accounting support centres. This study explores the responses of lecturers and students to the use of technology, and specifically the use of discussion boards, in the enhancement of an existing 'face-to-face' accounting support centre (the Centre) at one Irish university.

The remainder of the paper is organised as follows. In the next section the relevant literature is discussed. The problems encountered by students studying accounting are described. The experience of mathematics support centres is reviewed, given the similarity in terms of the numeric nature of the disciplines, as well as the documented experience and model provided by such centres. The need for research exploring the potential for technology to enhance support centres is elaborated upon. Data gathered using student questionnaires, lecturer interviews and online usage records are used to gain insight into student strategies for tackling problems with studying accounting, as well as student awareness, perceptions and usage of the supports. Finally, the conclusions drawn from that evidence are discussed and directions for further research are identified.

LITERATURE REVIEW

This section describes the problems encountered by students studying accounting subjects. Research documenting experience in the use of disciplinary support centres is explored. The potential for technology to enhance more established face-to-face supports is described. Finally, the need for additional research in this area is identified.

Problems with Studying Accounting

Research suggests that for many students their experience of studying accounting subjects is negative rather than rewarding (Geiger and Ogilby, 2000; Mladenovic, 2000). Some students see accounting as being important for a career in business. For others, however, it is a problematic, dry, dull and boring subject area, largely numeric in form (Lucas, 2000). Students also approach the study of accounting in various ways. For example, Lucas and Meyer (2005) find evidence of variations in the approach to learning between male and female students, and between those who specialise in accounting and those who do not.

Students also have varying motivations for taking accounting modules at third level, which in turn influence the quality of the learning outcomes achieved (Howorth, 2001). Typically, accounting subjects are taught on a wide variety of general business courses, as well as on specialist accounting and finance programmes, and often as core modules, to students who would otherwise not have chosen these modules. In the Irish context, the impact of prior educational experiences is related to the approach taken by students to learning accounting subjects (Byrne and Willis, 2008). Students who have studied accounting to Leaving Certificate level encounter difficulties because they overestimate the perceived predictability of accounting examination papers at third level. Byrne and Willis (2001) highlight the extent to which this 'predictability' at second level is not just confined

to the topics being examined, but also to the ways in which they were being examined, with the style and content being virtually unchanged over the years.

To date, research exploring issues in studying accounting subjects in the Irish context has largely focused on the experiences of those on specialist accounting programmes. Greater consideration is needed of the wider population of business students studying accounting subjects and the difficulties which they experience in so doing.

Disciplinary Support Centres

One method of addressing specific difficulties in disciplinary areas is the use of disciplinary support centres. Examples have existed in the area of mathematics for a number of years, both in the Irish third level sector and internationally. Such centres aim to improve student retention and to address deficiencies in the mathematical competence of graduates. Good practice in the provision of mathematics support centres points to the need for such centres to have clear, autonomous identities separate from but with collaborative and complementary connections to discipline-specific programme providers (MacGillivray, 2008). The provision of one-to-one support, either by appointment or on a 'drop-in' basis, is a key component of most mathematics support centres, although students' unwillingness to use such supports is also identified as a key barrier to their effectiveness (Croft, 2008; Lawson et al., 2001; Lawson et al., 2003; MacGillivray, 2008).

Evidence suggests that barriers to engagement with support mechanisms are complex (Clegg et al., 2006; Symonds et al., 2008). Students often need to be facilitated in making the first step, with conclusive evidence of consequent improvements in academic performance often difficult to establish (Croft, 2008; Lawson et al., 2003; Mac an Bhaird, 2008; Pell and Croft, 2008). Lack of awareness of the centre's location, of the facilities available and to whom they are accessible, unhelpful staff, student embarrassment and fear of appearing 'stupid' in front of peers and teaching staff, and a general sense of there simply being too many problems to be addressed all act as barriers to availing of the supports offered (Lawson et al., 2001; Symonds et al., 2008). Mathematics support centres provide a model suitable for use in addressing the difficulties which business students face when studying accounting. The problems encountered in successfully operating such centres, particularly in relation to student engagement, require the careful adaption of the model to an accounting context. Specifically, the focus needs to be on how students learn and towards the creation of 'an environment within which students can be properly supported in their learning in ways that avoid the need to seek help that individualizes "problems" in a negative way' (Clegg et al., 2006: 112).

The Potential for Technology to Enhance Support Centres

Race (1998) highlights the importance of students being active in their own learning and the need to engage with students on their own terms and in contexts that are relevant to them. The use of technology is suggested as one of the means of achieving this (Biggs, 2003; Boyce, 1999; Persell, 2004). As noted by Watson et al. (2007), many institutions have invested substantial resources in web-based packages such as Blackboard and WebCT to

offer online courses or to enhance regular face-to-face classes. These are two of a number of products that use the internet as a delivery platform for course management, thereby creating a virtual learning environment (VLE). Watson et al. (2007) also highlight the importance of understanding how the use of technology can improve the learning process.

Practical difficulties associated with online interaction to support students include the lack of immediate response or feedback given the temporally asynchronous nature of the interaction, the lack of verbal cues, the potential for under-use or abuse of the online facilities, and the time needed to moderate and monitor the discourse (McLuckie and Topping, 2004: 563). While potential exists for technology to add to the learning process, there is also a danger of reinforcing the surface approach to learning already documented in students of accounting (Booth and Winzar, 1993; Byrne and Flood, 2004). Rainsbury and Malcolm (2003) find very little evidence of the use of asynchronous web-based delivery in an accounting context. In their pilot study, a discussion board exercise in an intermediate accounting course was evaluated. They report that students from non-English backgrounds and mature students found it easier to express an opinion and contribute to discussions via discussion boards. Such students also liked the flexibility the discussion board gave them by giving them time to prepare responses and to analyse other students' ideas at their convenience.

Persell (2004) identified five ways in which the use of discussion boards contributed to improving pedagogy: making thinking visible to other students and to the instructor; creating an archive; facilitating the review of ideas; revealing the scaffolding necessary; and increasing engagement of both students and lecturer. VLEs, and particularly discussion boards, appear to offer one method of addressing difficulties with student engagement with disciplinary support centres. There is little evidence in the literature, however, on the use of discussion boards in this way, particularly as part of a disciplinary support for students encountering problems with studying accounting.

In summary, the difficulties which many business students face when studying accounting, particularly those on non-specialist degrees, are well documented. One method used in other disciplinary areas to address such difficulties is the provision of support centres. However, the experience to date with such centres has been mixed and the barriers to their successful use need to be addressed. Discussion boards in particular have the potential to overcome some of these barriers, although business students' responses to these technologies are not well documented in this context. The objective of this paper is therefore to explore the potential for using technology to enhance student support centres, through the investigation of its use in an accounting support centre. The research approach adopted is described in the following section.

RESEARCH METHODOLOGY

This section of the paper develops the research objective and presents the research approach adopted, including a discussion of the research site and a description of the data collection process and of the sample population.

Research Objective

In order to explore the potential for technology to enhance the operation of student support centres, this paper documents student and lecturer responses to the enhancement of an existing 'face-to-face' support centre through the addition of an online discussion board. Specifically the paper examines the following aspects:

- Student strategies for tackling problems with studying accounting
- Awareness of the supports (face-to-face and online)
- Perception of the supports (face-to-face and online)
- Usage of the supports (face-to-face and online)

The extent to which the student responses to the support centre vary according to their programme of study is also considered, as existing literature (for example, Byrne and Willis, 2008) suggests that non-specialist students may experience different difficulties and have different responses.

The Research Site

The research site for this study was an accounting support centre established at one Irish university. The rationale for setting up the Centre was to assist students experiencing difficulties with accounting in a manner similar to the support provided by mathematics supports centres. Face-to-face support was offered to students, on a drop-in basis, by staff of the Centre. One year into its operation, in order to enhance the Centre and to facilitate greater use of the support available, online discussion boards were developed and hosted via the institutional VLE (Blackboard). These discussion boards were moderated by staff of the Centre. The research study takes place six weeks after the online element had been launched and looks back at the operation of both facilities to that point.

Data Collection

Data were collected in three ways. A questionnaire, designed to elicit student responses to the Centre, was administered to students taking introductory accounting modules during scheduled accounting classes. The questionnaire gathered information in three areas. The first part concerned the students' programme of study and their strategies for tackling difficulties; the second section related to awareness, perceptions and usage of the face-to-face support; and the third dealt with awareness, perceptions and expected usage of the online support. Prior to completing the questionnaire the purpose of the study was explained and the students were reassured that their individual responses were confidential and would only be used for research purposes. Table 1 presents a breakdown of the sample and the usable response rate for each programme group. The overall response rate was 42 per cent.

For each of the groups represented in Table 1, introductory accounting modules are core, mandatory modules on their programme of study. The specialist group (students studying for a degree in Accounting or Finance) take introductory accounting modules

Table 1: Student Survey Response Rates

Group	Sample Size	Response Rate
Specialist	123	47 (38%)
Business major	181	89 (49%)
Business minor	156	55 (35%)
Total	460	191 (42%)

which provide the foundation for a series of compulsory modules to be taken in later years. The business major group have the option to take a range of further accounting modules within a broad business degree. The business minor group comprises students who specialise in other disciplinary areas but who take a range of mandatory introductory accounting modules. The literature suggests that there may be differences in the problems encountered by students studying accounting on different programmes of study, and these differences might also impact on their response to the support offered. A chi-squared test was used to investigate differences in responses between each of the student groupings. This test is used in investigating differences in data presented in the form of a contingency table. Significance was established at the 1 per cent level.

Secondly, actual usage of the online supports was measured by the number of hits on the Blackboard website (a 'hit' was recorded when a student accessed the contents of the discussion board). This data were collated for the six-week period immediately following the launch of the online support. Total registered users consisted of 1,800 students, 12 lecturers and 5 support centre staff.

Finally, to gain the response of the lecturers, unstructured interviews were conducted. The interviews were guided by a list of open-ended questions based on the aspects investigated in the student questionnaire. Punch (1998) describes unstructured interviews as a way to understand the complex behaviour of people without imposing any *a priori* categorisation which might limit the field of inquiry. Taking into account the research objectives of the study, this approach was deemed the most appropriate.

The next section discusses the research findings, specifically in relation to student strategies for tackling problems with studying accounting, and awareness, perception and usage of both the face-to-face and online support.

RESEARCH FINDINGS

Student Strategies for Tackling Problems with Studying Accounting

Students were asked how they deal with problems with studying accounting, with each respondent allowed to choose as many responses as were relevant from a range of options. Table 2 lists the options and reports the level of responses for each of the three distinct student groups (specialist, business major and business minor). All student groups reported the same level of use of peer supports (30 per cent). The results indicate that the groups otherwise have different strategies when faced with a difficulty. A chi-squared test

shows that the association between rows and columns is not independent and this is statistically significant (chi-square = 17.190, DF = 12, P-Value = 0.009).

Table 2: Student Strategies for Responding to Difficulties

Strategy	Specialist		Business Major		Business Minor		Total	
	No.	%	No.	%	No.	%	No.	%
Don't seek help	29	33	63	39	50	56	142	42
Ask classmates	26	30	50	31	27	30	103	30
Consult tutor/lecturer	25	29	32	20	8	9	65	19
Use the Centre	7	8	18	11	5	6	30	9
Total observations	87	100	163	100	90	100	340	100

The business minor students' responses reveal they are less likely to consult lecturers and tutors, or the Centre, than either the specialist or business major groups. There is no significant difference between the strategies adopted by the specialist and business major groups (chi-square = 3.019, P-Value = 0.389, when the business minor column is excluded from the analysis). Both these groups are amenable to consulting lecturers and tutors. However, at the time of the questionnaire, only 8.8 per cent of total responses indicate a willingness to use either the face-to-face or the online support of the Centre when faced with an accounting difficulty.

Lecturers expressed a variety of views on how students tackle difficulties. All felt that when students decide to tackle a problem, they first try to figure it out for themselves, after which their most important support is their classmates. Only a minority of the lecturers (three) felt that the typical student would consult a lecturer. For two of these three, this view was expressed in somewhat aspirational terms, for example, 'I would like to think they would ask me first.' Similarly, only two lecturers felt that the typical student would consult with tutors. Most lecturers felt that the majority of students would not use either the face-to-face or the online supports.

Awareness and Perception of the Face-to-Face Support

Literature suggests that lack of use of the support centre might be explained by either a lack of awareness (Lawson et al., 2003) or by negative preconceptions (Symonds et al., 2008). The questionnaire sought to gauge awareness and perception of the supports across the three student groups. Table 3 reports the proportion of respondents who were aware of the face-to-face support.

The findings indicate a high level of awareness in two of the groups but a low level of awareness in the business minor group (chi-sq. = 72.35, at the 1 per cent level). It should

Table 3: Level of Awareness of the Centre's Face-to-Face Support

'Are You Aware of the Accounting and Finance Resource Centre?'	Specialist		Business Major		Business Minor		Total	
	No.	%	No.	%	No.	%	No.	%
'Yes'	44	94	82	92	19	35	145	76
Total response	47	100	89	100	55	100	191	100

be noted that the group with the lowest reported level of awareness is taught by a lecturer involved directly in the establishment of the Centre and by a second lecturer whose interview suggests a positive response to the Centre. Table 4 presents student perceptions of the face-to-face support of the Centre. The results show positive perceptions across all groups, with 94 per cent of respondents agreeing that 'it is a good idea'.

Table 4: Positive Perception of the Centre's Face-to-Face Support

'I Think the Centre Is a Good Idea'	Specialist		Business Major		Business Minor		Total	
	No.	%	No.	%	No.	%	No.	%
'Yes'	35	97	81	94	47	90	163	94
Total response	36	100	86	100	52	100	174	100

Students' awareness and perceptions may also be influenced by lecturers' awareness and perception. All lecturers displayed a convincing awareness of the face-to-face support. They knew where and how it operated. For example, a number of lecturers commented on their observing students attending the Centre and of the apparent level of demand for its services, as evidenced by students queuing outside the door while waiting to meet with Centre staff. While they all expressed guarded support for the concept of an accounting support centre, issues in relation to responsibility for and the control of such student supports were also raised. The extent to which supports should be provided on a disciplinary basis, as per the operation of the Centre, rather than at the level of individual modules and therefore the responsibility of individual module lecturers, constituted the core of these concerns. A number of lecturers expressed the worry that students might use the face-to-face support *instead of* approaching the lecturer.

Lecturers varied in their perceptions of the supports. All who taught introductory material had given initial information to their students about the Centre. The extent to which this was followed up with subsequent announcements, emails or notices on their own individual module blackboard sites varied considerably though. Three lecturers displayed real involvement, describing how they advised students of the face-to-face support throughout the academic year. They also referred individual students to the Centre. The remainder appeared largely disengaged. Generally lecturers expressed the opinion that they would

only refer a student to the Centre if the student's difficulties did not relate to the subject matter of their own lectures, that is, if such students had more extensive or more fundamental problems than the lecturer had the time to address. One lecturer went so far as to express the opinion that referring a student to the Centre would be 'a dereliction of duty'.

Usage of the Face-to-Face Support

Table 5 reports usage of the face-to-face support among the student groups. The low level of usage reported (7 per cent of those sampled) cannot be explained by lack of awareness (except perhaps in the case of the business minor students) or negative perceptions; nor can it entirely be explained by reluctance to seek help outside the peer group, since both the specialist and the business major groups already seek help from tutors and lecturers (see Table 2).

Table 5: Usage of the Centre's Face-to-Face Support

'Have You ever Used the Centre?'	Specialist		Business Major		Business Minor		Total	
	No.	%	No.	%	No.	%	No.	%
'Yes'	6	13	5	6	2	4	13	7
'No'	41	87	84	94	53	96	178	93
Total	47	100	89	100	55	100	191	100

Table 6 reports the main reasons given by respondents for non-usage of the face-to-face support (other than lack of awareness or knowledge). These reasons reflect categorisation of a longer list of options given on the questionnaire. Fifty-one per cent of business major respondents, 30 per cent of specialist respondents and only 18 per cent of business minor respondents indicate that their primary reason for not using the Centre is that they are 'coping well'. A statistically significant chi-square of 20.349 (at the 1 per cent level) confirms that the association between the reasons of non-usage and population subsamples is not independent. Additionally, two-by-two chi-square tests of the specialist, business major and business minor categories are statistically significant. The main barriers to usage identified by respondents concern timing (not having the time to access the Centre or the Centre being open at unsuitable hours) and information (not knowing where and how to access the Centre).

Lecturers considered that the main reason for non-use of the Centre could be that students are already coping well with materials. They had doubts about the extent to which students use the face-to-face supports, other than in the immediate pre-examination period. Some suggested that cultural issues could be implicated, citing students' reluctance to present with problems, due largely to a fear of 'loss of face'. Lecturers felt that Irish students may feel intimidated and prefer to simply address problems independently.

Table 6: Reasons for Non-Usage of the Centre's Face-to-Face Support

Timing Issues *('I haven't got the time to go'/'The times don't suit me')* Coping Well Already *('I am coping well at present')* Not Aware of Location *('I don't know where it is'/'I've never heard about it')*	**Specialist**		**Business Major**		**Business Minor**	
	No.	**%**	**No.**	**%**	**No.**	**%**
Timing issues	16	35	27	31	12	30
Coping well already	14	30	45	51	7	18
Not aware of location	16	35	16	18	21	53
Total	46	100	88	100	40	100

Awareness and Perception of the Online Support

As Table 7 shows, 64 per cent of the respondents were aware of the online support. However, the business minor group displayed a significantly lower level of awareness, at only 22 per cent, a finding significant (at the 1 per cent level) with a chi-square of 59.10. As can be seen in Table 8, there was a positive perception (i.e. the concept is 'a good idea') of the online support across all groups, with 97 per cent responding that it would be of benefit to them.

Table 7: Level of Awareness of the Centre's Online Support

'Are You Aware of the Accounting Online Resource Site?'	**Specialist**		**Business Major**		**Business Minor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
'Yes'	34	79	73	83	12	22	119	64
Total response	43	100	88	100	54	100	185	100

Table 8: Positive Perception of Online Support

'Do You Think an Online Support Site Is a Good Idea?'	**Specialist**		**Business Major**		**Business Minor**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
'Yes'	42	89	86	97	53	96	181	95
Total response	43	100	88	100	54	100	185	100

Respondents were also asked if they planned to use the online support in the future to deal with an accounting problem. The results are presented in Table 9. The findings endorse

the online support with 80 per cent of the respondents anticipating using it. This finding is consistent across all groups.

Table 9: Expected Usage of the Centre's Online Support

'Do You Expect to Use the Accounting Online Support Site in the Future?'	Specialist		Business Major		Business Minor		Total	
	No.	%	No.	%	No.	%	No.	%
'Yes'	35	81	71	81	42	78	148	80
'No'	8	19	17	19	12	22	37	20
Total	43	100	88	100	54	100	191	100

Lecturers expressed a mixed response to the addition of an online aspect to the Centre. Nine lecturers had attended a short presentation given by Centre staff prior to its launch. Most lecturers were enthusiastic about the potential for technology to deliver support and to communicate more effectively with students. The benefit of the online resource as a means of encouraging student peer support, particularly where students are isolated in large classes, was also recognised. However, issues expressed in relation to the operation of the face-to-face support were accentuated in the context of the online support. For example, lecturers articulated concerns about the possibility of inconsistencies between the online moderator of the discussion board and individual module lecturers in the approach adopted in addressing accounting problems, which could in turn lead to greater confusion amongst students.

Usage of the Online Support

Table 10 summarises usage statistics for the online support. Sixty-nine per cent (1,236) of the total registered users logged on to the online support. (All students taking any Accounting or Finance module are automatically registered.) This compares well to an expected usage rate of 80 per cent (see Table 9). Student users accounted for 86 per cent of the total number of hits, Centre staff generated 12 per cent of the hits and lecturers the remaining 2 per cent.

Table 10: Usage of the Centre's Online Support for the Study Period

	Students		Lecturers		Centre Staff		Total
	No.	%	No.	%	No.	%	No.
Registered users	1,800	100	12	100	5	100	1,817
Active users	1,236	69	6	50	5	100	1,247
Number of hits	7,527	86	184	2	1,096	12	8,807

Within the student users, 11 per cent (140) of the 1,236 active users were responsible for 3,956 (52 per cent) of the total group hits.

Despite the enthusiasm expressed by lecturers, actual hits by them point to limited interest in the extent or nature of actual student usage. Only four of the lecturers interviewed had actually logged on. Only two of these had logged on more than once. Of the remainder, one had technical difficulties, while a number of the others had simply 'not got round to it'.

One of the barriers identified to using the face-to-face support concerned timing issues (see Table 6). The development and launch of the online support offers a resolution to this issue. Figure 1 presents the pattern of usage by days of the week. It is noted that Monday is the most popular day (accounting for 27 per cent of the total hits). Usage remains consistent (18 per cent) from Tuesdays to Thursdays, falling to just under 10 per cent on Fridays. Weekend usage counts for 9 per cent of the hits.

Figure 1: Usage of the Centre's Online Support by Days of the Week

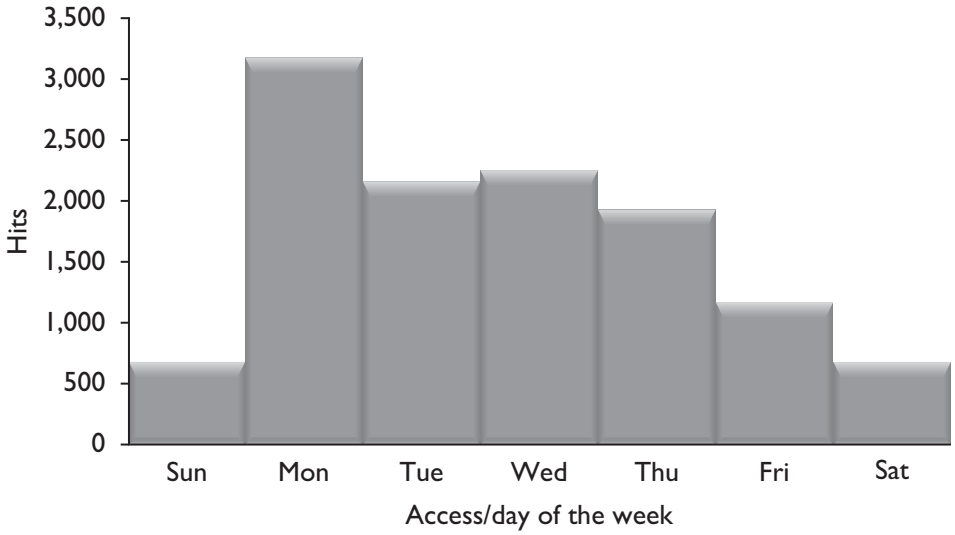
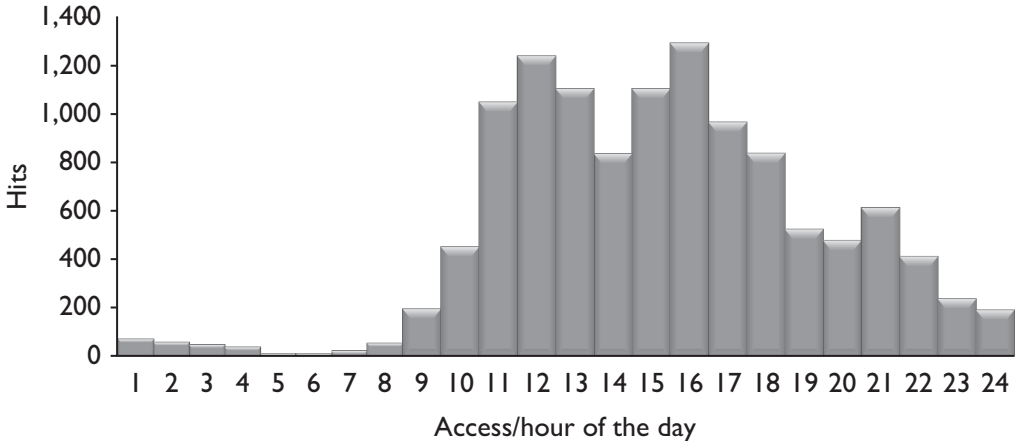


Figure 2 depicts the average pattern of usage over a 24-hour period, facilitating comparison with the opening hours of the face-to-face support.

As shown in Figure 2, the online support is used at almost all hours of the day. Twenty-five per cent of hits occurred outside of what could be deemed the normal business hours – times when the more traditional supports of lecturer or tutor access are not available. This pattern and level of usage to date, therefore, signals the potential of the online support to overcome issues of timing and access which were cited by students as barriers to the use of the face-to-face support.

Figure 2: Usage of the Centre's Online Support by Hours of the Day



DISCUSSION AND CONCLUSIONS

This paper explores the potential for using technology to enhance the operation of student support centres, through the investigation of its use in an accounting support centre. While all groups of students reported positive perceptions of the supports, the business minor group displayed significantly less awareness of the supports available, despite accounts of extensive attempts by their lecturers to inform these students of those supports. Business minor students generally have lower attendance rates at accounting lectures and higher failure rates in accounting examinations. As suggested in the literature, reasons behind early detachment are complex (see, for example, Clegg et al., 2006) and need to be explored further, at the programme as well as the disciplinary level, if the potential of any form of support to assist these students can be realised. Further research in this area is required.

The study also found that the business minor group tackles problems with accounting differently to the specialist and business major groups. The respondents from this group are less likely to report that they were coping well; despite this, however, they are also less likely to seek external support. This implies that the group who are most likely to need support are least amenable to accessing the supports as they were originally constituted at the Centre (i.e. face-to-face). For students generally, the reasons reported for non-usage of the face-to-face support were those of timing, lack of awareness and a perceived lack of need. These findings are similar to existing evidence from the operation of mathematics support centres, both in Ireland and internationally (Lawson et al., 2001; Mac an Bhaird, 2008; MacGillivray, 2008). The online support has the potential to overcome these barriers. Early evidence in relation to the pattern of usage of the resource, in particular the extent of 'out-of-hours' usage and the high proportion of students accessing the site, suggests that this potential is already being realised. Additional research, perhaps of a longitudinal nature, would enable greater insights into this.

Lack of lecturer response and engagement, most notably with the online aspect, raise complex issues about the role of support centres within the teaching and learning relationship. Interposing any additional element in the lecturer–student dynamic is not without its challenges. Ostensibly, the discussion board has the potential to provide valuable insights to lecturers in gauging students' problem areas, and in directing lecturer responses. However, at this early stage, lecturers appear cautious of embracing the potential of the support as a way to enhance their own understanding of the nature of student concerns. Where lecturers are using the online support their intent appears more defensive than constructive in nature. This is an area which needs to be explored further if the Centre is to become integrated within the overall learning experience.

The online support has the potential to operate as a complementary mechanism, enhancing rather than replacing face-to-face support, and contributing to improving pedagogy in a manner similar to that reported by Persell (2004). For some students, it represents a 'safer' point of first contact, allowing those students to engage with supports on their own terms, at their own pace, and at times and venues of their choosing. Other users may benefit from the one-to-many response facilitated by the discussion board. Practical difficulties identified in the literature (for example, by McLuckie and Topping, 2004) have not been realised in the experiences reported here. The lack of lecturer response, however, may inhibit the full realisation of the potential for technology to enhance the operation of student support centres.

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