Use of Diaries/Journals as a Research Tool in Estimating Credit Rating in Distance Education

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A key concept used in distance education is that of credit rating. Credit rating represents the total work load that a student has to shoulder in following a study programme, and is often expressed in terms of study hours. Credit rating has to be carefully worked out in distance education programmes as the learners (most of them may be employed) should be realistically able to allocate the required number of study hours to successfully complete a programme. The paper discusses how diaries were used to collect information related to time-use by a sample of students following the Post-graduate Diploma in Education at the Open University of Sri Lanka, and to evaluate the appropriateness of the credit rating of the selected courses as used at present.

INTRODUCTION

Credit rating is one of the key concepts in distance education. It indicates the average number of study hours that a distance learner would devote to the completion of a course equivalent to one credit. The Open University of Sri Lanka (OUSL) specifies the maximum number of credits that can be taken by a student in an academic year as two. Each course offered by the University is consequently

denoted in terms of a credit rating which may be 1/6, 1/3, 1/2 or 1 credit.

In reality, however, the credit rating for a particular course is determined by the course team according to their perceptions of the time which would be taken by an average student to master the course. Our belief, however, is that even though estimating an average is possible, the study time taken can vary widely, differing according to the nature of the clientele.

The concept of credit rating is fundamental to the accreditation and recognition of the qualifications awarded by an education institution. Especially in distance education which accepts flexibility of entry, exemptions for already acquired qualifications and in view of possibility of the transfer from one programme or level to another, credit rating becomes significant. The interest in negotiating inter-university compatibility of courses or what is called 'cross crediting' has also initiated a need to bring the estimation of credit rating under close scrutiny.

Despite its importance as a basic characteristic of distance education programmes, no consensus exists regarding the estimation of credit rating. In Sukothai Thammathirat Open University, Thailand, each six credit distance education course follows a standard 15 unit format. One unit requires one week's study. Macintosh, Woodley and Morrison (1980) point out that each credit would require an average of ten hours of study a week for 36 weeks of the year. At OUSL, a credit is considered as equivalent to 450 study hours.

The disparities that exist in assigning a number of study hours per credit from one distance education institution to the other would lead firstly to problems of deciding on the compatibility of courses, when issues of accreditation, exemption or transfer emerge. Secondly, there is the question as to whether an estimation of credit rating approximates the actual number of hours devoted to study by individual students.

Even though, an accurate calculation of study time might not be possible, the researchers felt that the validity of the credit rating

accepted by OUSL in the particular programme of study under examination should be examined through a study of student responses.

REVIEW OF LITERATURE

Personal documents have long been in use in social science research. Bailey (1982) considers the study of personal documents to be similar to participant observation in that it has the distinct advantage of the spontaneity of first-person accounts and a depth of intimacy and innermost feeling not generally available in non-personal documents. Numerous teaching, learning, evaluative and research-related uses of diaries or journals have been documented by Howell-Richardson and Parkinson (1988). They point out that pedagogically, diaries/journals are used to identify and allay anxiety, offer advice on specific difficulties, provide study skills and individual feedback, encourage student self-assessment, encourage curiosity about the target culture and keep personal records of foreign travel and practice language use. They found that journals can help investigate language learner behaviour, especially outside class, examine student feelings, and conceptualizations and explore how these factors relate to learning.

A survey of literature pertinent to the use of diaries or journals carried out by us indicated the extent of the field in which they had been used. Baby diaries had been used to study the nature of instinctive behaviours and recapitualationism (Wallace et al, 1994), while Bhagban (1984) used diary entries (jointly with other sources) made by the child's mother from a researcher's perspective to chronicle a child's reading and writing development.

Diaries have also been widely used in language teaching-learning, especially in second languages. Kreeft et al (1984) and Hudelson (1988) indicate how diaries, or journals can be used to promote fluency in writing and to help students see writing as a means of self-expression. Jones (1995) examined the role of journal-keeping in the middle-school language curriculum and found that using journals and

associated activities provide students the space they need so that they can actually begin to enjoy the writing process. Gains (1989) examined the diaries, in which parents of poor readers recorded their child's reading activities at home and reported positive change in reading attitudes for both parents and children.

Drew (1980) reporting on an initiative aimed at improving peer teaching - learning and group inquiry strategies points out how journal keeping by students can help them to learn from each other and to use instruments at a faster rate. Tarnove (1988) points out that journals can help teachers gauge both their own teaching and their students' grasp of the material.

Diaries and journals have also been used in teacher education and teacher performance. Thus Yinger and Clark in two articles (1981, 1985) focus on teacher performance. The first discusses, in particular, methods and limitations of journal keeping in research on teaching and planning. For many of the teachers, journal writing was a valuable tool in their planning and teaching. The second paper discusses the theory and practice of using journal writing as an aid to student learning and teachers' professional development and describes 'systematic reflection', a specific set of journal - keeping techniques that have been found useful in helping teachers take control of their own professional development. Blanton and Moorman (1993) report that a diary may be an important educational tool in helping reading teachers to access knowledge acquired during in-service education and regulating their instructional activity.

Uses of diaries/journals in settings other than education, have also been explored. Thus Cooper (1994) found that women administrators felt journal keeping was positive and regenerating and that the diaries were also educational in that they could help the women see and speak more clearly about their lives. Goldsmith (1995) suggests that journal writing helps community service leaders to heighten observational skills, process information, explore feelings, assess progress, evaluate, improve communication, enhance writing skills and fluency and build citizenship.

Two studies in our literature survey had inquired into the role of diaries,/journals in time - use. Both these studies had attempted to relate respondent characteristics with time-use. Martin-Reynolds et al (1991) used time - use diaries and correlated the character ratings of the students who had used them. They found that the students in the high - character group spent more time studying than the low-character group, but the low-character group spent more hours working outside the home. Steeves and Bostian (1982) comparing the cooperation levels of diary and questionnaire respondents found that the respondents who agree to complete time-use diaries differ significantly in several characteristics from those who are only willing to complete a questionnaire.

Howell-Richardson and Parkinson (1988) emphasize that diary research requires consideration to be given to variables such as journal layout, access, assignment administration and feedback. They also point out the practical difficulties that can arise from these variables which include marking or grading of entries, conflicting student and teacher purposes, conflicting teacher and administrative uses and first-versus-second language use in entries. Similarly, Yinger and Clark (1981) raise questions regarding whether or not the journal, as a personal document, can be a legitimate inquiry mode for studying human experience and if so, what safeguards must be instilled to defend the quality and validity of the research. They conclude that while the journal is an imperfect instrument for learning about human thought, journal keeping as a research tool is a benign, generative and economical device.

The survey of literature thus indicated that journals have been profitably used in educational research, and that the journal can be a valuable research tool for obtaining information on student's study patterns, time use, perceived difficulty levels of specific courses and when analysed in relation to background characteristics, the influence of characteristics such as age, gender and marital status on the above aspects of studying.

THE OBJECTIVES OF THE PRESENT STUDY

The objectives of the study used as a basis for discussion in this paper are

1. the development of an instrument to assess the average number of study hours in selected courses of the Post Graduate Diploma in Education Programme at OUSL

2. the estimation of study hours and a suitable credit rating for the selected courses, based on student responses, and

3. identification of variations in study patterns in relation to student background characteristics.

DESIGN OF THE INSTRUMENTS

The instruments of data collection were designed with the objectives outlined above in mind. One of the objectives envisaged was to examine the relationships between the background characteristics of students and their study patterns. A short questionnaire was devised to gather basic information such as sex, age, marital status, Regional Centre attached to and the closest Study Centre of the students.

Information about study hours and study patterns were to be identified through the journal. Developing the journal was a more complicated task because of the large number of specific items of data that were to be collected. The format had to accommodate all seven days of the week and five main time slots:

5.00 a.m. - 3.00 p.m.	3.00 p.m. - 7.00 p.m.
7.00 p.m. - 9.00 p.m.	9.00 p.m. - 11.00 p.m.
Any other	

As information expected was related to two courses at each level of study (level 6 and 7), normally referred to as Part I and II of the programme, each cage against the days of the week was horizontally divided into two, so that the student could enter in the upper section, the course code of the course (e.g. in Part I either ESP 1306 - Educational Psychology or ESP 1307 - Assessment of Learning

Outcomes, or in Part II, either ESP 2208 - Comparative Education or ESP 2207 - Curriculum, School and Society).

The lower section of the cage was to be used to state the activity which was engaged in (e.g. day schools or tutorial classes) and the actual number of hours studied. The eight academic activities identified were to be denoted with the following symbols.

DS-Day School	SS-Self Study
AV-Use of Audio-visual material	EX-Preparingfor Examination
CA-Assignments	PD-Discussion with Peers
T-Tutorials	L-Library

The final instrument (Appendix A) was compact but could elicit the required information that was needed from the student. As the data collection period spanned 06 months (from the commencement of academic activities to the conduct of final examinations) 24 copies of the journal format were distributed to each student for completion.

SAMPLE

The students following the Post Graduate Diploma in Education Programme in 1995/96 formed the target population for this study. This programme is conducted in two media, Sinhala and Tamil and therefore it was intended to select a sample of 300 Sinhala medium and 150 Tamil medium students. At the outset, the response rate of Tamil medium students was very low, and therefore the study had to be limited to Sinhala medium students only.

Even though, 300 questionnaires were distributed to the Sinhala medium students at the beginning of the study, only 222 students completed the questionnaire which provided their background information. Therefore, the sample for the study is considered to consist of 222 Sinhala medium students.

DATA COLLECTION

The sample and the administration of questionnaires had to be decided keeping in mind the unique characteristics of the instrument.

Even though the intended sample was to be drawn from the graduate teachers who were following the PGDE programme, it was felt that the completion of the journal was a complicated task and should be explained to the respondents. As regular contact between students and teachers are not maintained in a distance education university, it was decided to obtain assistance from the tutors who conduct tutorial classes in different parts of the country.

The tutors were briefed about the study and the instruments were handed over to them for distribution to students. They were requested to constantly remind the students about the completion of the diary and to forward the completed journals to researchers. The researchers, in turn, maintained contact with the tutors, requesting their cooperation for the study.

Most of the problems which surfaced in data collection, not unsurprisingly, stemmed from the nature of the instrument used for the study. To continue as participants in the research it was essential for the students to complete the journal, every day of the week, and week after week for a period of 06 months. Further, specific entries had to be made in relation to the courses studied and the type of activity engaged in. Such a commitment was undeniably too demanding from a student group who were employed and probably had family, social and work obligations to fulfil. The following table which shows the responses rate over time is indicative of the decline in response.

Table 1 - Rate of Response in Journal Completion

Month (1996)	No. of Respondents	Percentage
July	74	33.3%
August	101	45.4%
September	100	45%
October	73	32.9%
November	43	19.4
December	38	17%

Source: Survey Data

We were also conscious that all the responses in the journals may not be genuine. Even though the majority appeared to be maintaining an accurate record of their study patterns, a few respondents had indicated unrealistically long hours of study.

DATA ANALYSIS

As the objectives of the study were related to identification of study patterns, it was decided to use techniques of data analysis such as frequencies, cross-tabulations and chi-square tests of significance. Yet before relationships could be examined, it was necessary to identify the variables and convert them into meaningful numerical codes for computer analysis. This proved to be a laborious exercise, especially in relation to the long period for which the data had been collected.

Thirteen variable names including the identification number were identified under background characteristics. They were

1.ID number	8.Designation
2.Level of study	9.Residence-District
3.Sex	10.Residence-Regional Centre
4.Age	11.Closest study centre
5.Stream of study	12.Distance to Regional Centre
6.Civil status	13.Transport facilities
7.Number of Children	

The 14th variable was the total number of hours used for study during the week. As the respondents were required to state the number of hours in which they studied one of the two courses in the particular level of their programme chosen for this study, it was possible to combine in one variable two courses from the two levels. Thus, Variable No. 14 indicated in respect of a Part I student the number of hours they had devoted for Educational Psychology during week 1; in the case of a Part II student it indicated the number of hours they had devoted to Comparative Education. The level (Part I or II) of the programme for which they were enrolled was shown by Variable No. 2, 'level'. This was followed up by Variable No. 15, which indicated the number of hours devoted for either Assessment of Learning Outcomes (Part I) or Curriculum, School and Society (Part II). To minimize the number of data entries, it was decided to calculate the total number of hours for the week. The 46 variables that followed represented the data related to the 23 weeks for which the respondents completed the journal.

One aspect of the pattern of study which we wished to examine was related to the number of study hours spent during week-days and on week-ends. It was decided to allot two variables for these two items of data and to calculate the amount of time manually to be entered into the computer.

The next aspect considered was the most popular time slot preferred by the respondents. It was felt that correlation of this information

with age and sex of the respondents would yield useful insights into allocation of time between study and other commitments by the respondents. The five specified time slots are given on page 35.

Ideally, this information should have been analysed by the computer but as it would have meant that the information have to be entered for every day of the 24 weeks for a total of 101 respondents, it was decided to set apart 6 variables (including 'No Response') and to enter the total number of times over the period that the respondent had chosen to study in a particular time slot.

Finally, information has been obtained related to the number of study hours devoted to each activity. Here too, it was decided to add up the total time for each activity per course, as had been done for the variables 14 and 15. Variable No. 49 was the study time devoted for Day Schools for ESP 1306/ESP 2208 and Variable No. 50 for Day Schools for ESP 1307/ESP 2207. The 14 variables which followed (in pairs) indicated the study time devoted to examinations, self-study, assignments, AV use, discussion with peers, tutorials, and library work (See Table 2).

Table 2 - Variable numbers and variable names related to time used

Variable Number	Variable Names
49/50	1. Day School ESP 1306 or 2308/1307 or 2307
51/52	2. Examinations ESP 1306 or 2308/1307 or 2307
53/54	3. Self study ESP 1306 or 2308/1307 or 2307
55/56	4. Continuous Assessment ESP 1306 or 2308/1307 or 2307
57/58	5. Audio visual material ESP 1306 or 2308/1307 or 2307
59/60	6. Discussions with peers ESP 1306 or 2308/1307 or 2307
61/62	7. Tutorials ESP 1306 or 2308/1307 or 2307
63/64	8. Library ESP 1306 or 2308/1307 or 2307

PROBLEMS AND POSSIBILITIES

Our study clearly indicated the advantages and limitations in using journals for research in distance education.

As envisaged at the outset, analysis of data gathered through journals could be the most accurate method of estimating actual time devoted to study by students. It is possible to surmise the credit rating that is appropriate for particular courses on the basis of this information.

How accurate the credit rating arrived at, however, is dependent on the representativeness of the sample which responds to the study, the genuineness of the responses and the consistency in journal-keeping over the total duration of the study. The low rate of response and the sporadic nature of journal entry would detract from the role of the findings of a study. Our study also indicates the difficulty of obtaining commitment and maintaining a high level of motivation in a dispersed student group in participating in a demanding research project, which requires keeping a journal for a period of six months. Even though in order to estimate the credit rating, a study would have to extend for over the entire duration of the programme, it is relevant to inquire whether different samples can be used for short periods of time or for a limited number of courses only.

We also highlighted the practical difficulties that we encountered in scoring, grading and entering of data collected from the study which may surface in any study using diaries or journals for data collection.

Despite the above difficulties, our study found the journal to be a useful tool for identifying study patterns in relation to different respondent characteristics. The findings would reveal the constraints under which particularly disadvantaged groups such as women or those resident in remote areas. organize their time-use in relation to their education and thus would indicate what measures should be taken to reduce the effect of such constraints.

The most significant outcome of this type of study should, perhaps, accrue to the students, who participate in a research project such as this. The exercise of journal-keeping would have provided them with a means for self-assessment, for planning and managing their time, and helping them to take control of their own professional development.

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Appendix A

Post Graduate Diploma in Education Programme

Registration No: ☐☐☐☐☐☐☐☐☐

Week: From .... to ....

Subject: Educational Psychology/Assessment of Learning Outcomes
Code No: ESP 1306/1307

Subject: Comparative Education/Curriculum, School and Society
      ESP 2208/2209

Date		Time 5.00 a.m. 3.00 p.m.	3.00 p.m. 7.00 p.m.	7.00 p.m., 9.00 p.m.	9.00 p.m. 11.00 p.m.	Other times used
Sunday	(i)					
	(ii)					
Monday	(i)					
	(ii)					
Tuesday	(i)					
	(ii)					
Wednesday	(i)					
	(ii)					
Thursday	(i)					
	(ii)					
Friday	(i)					
	(ii)					
Saturday	(i)					
	(ii)					

Instructions :- Write the course code in the first line (I) and the time spent for a particular activity in the second line (II). To indicate the activities, please use the following codes.

DS-Participation in Day School

SS-Self Study

AV-Use of Audio - visual material

T-Tutorials

Ex-Preparation for examinations

CA-Writing assignments

L-Use of Libraries