



COMMONWEALTH of LEARNING



Managing Student Records
in Distance Education

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A TOPICAL, START-UP GUIDE TO DISTANCE EDUCATION PRACTICE AND DELIVERY



The challenge of student record management is to develop a clear picture of “who needs what” information

INTRODUCTION

Records can tell stories about diverse groups of students that help institutions provide a continuously improving, quality learning experience. Sophisticated databases for student record management now make it possible to free up time previously spent in endless data capturing, and focus attention on interpreting the data and responding to information.

To design a student record system that produces meaningful, decision-making information, a narrow, mechanistic approach is insufficient. The challenge is to think holistically about what you want to achieve, and how best to achieve it.

Let's begin with a snapshot from practice. If an analysis of registration forms at the University of Pretoria, South Africa shows that more than 99 per cent of students enrolled in print-based distance education programmes have mobile phones, what does this mean?

In the education faculty, programme organisers decided that using mobile phones to send regular Short Message Service (SMS) messages to their students, many in remote areas, was an ideal way to create a supportive learning environment.

SMS was used to:

- **Alert students to the dates learning packs were sent.**

“Dear Student. Your study material was posted to you today. Enquire in time, quote your tracking number: PE123456789ZA, at your post office. UP”

A high number of packages were being returned, as most rural students visited their post offices infrequently. If students knew that their materials were sent, they would make every effort to pick them up in good time. Subsequently, there was a significant drop in the number of returned packages, and in accompanying costs.

- **Inform students about extension dates for assignments and to encourage them to submit.**

“If you have not submitted Assignment 2, due to late dispatch of study material, you may submit before Sept. 19. Do this urgently to help you pass your exam. UP”

Subsequent assignment submission rates were normal, despite the late arrival of materials.

- **Inform students about venue changes for contact sessions.**

“ACE Edu Management contact session block 1 from July 7-9 for modules EDM 401 EDO 401 ONLY, changed to Town Hall Main Street KOKSTAD. New letter posted. UP”

- **Notify students of deadlines for contact session registrations and encourage attendance.**

“April exam proved that students attending contact sessions are more successful. Please attend July contact session. Register per fax before or on Friday, July 6. UP”

Subsequently 58 per cent of learners registered before the closing date, higher than the normal rate of less than 40 per cent. In response to a reminder of the contact session dates, 95 per cent of registered students attended.

- **Remind students to register for examinations.**

“Dear Student. We have not received your registration for the Oct. exam. Please fax registration form or letter not later than Thursday, July 31. UP”

Subsequently, the number of exam registrations increased compared to previous figures.

This short case study shows student records in action. Starting with an analysis of student profiles gleaned from registration forms, information about the high percentage of students with mobile phones led to management's decision to establish an M-learning Management System and SMS-portal. Administrative and academic staff can send targeted information to specific groups as bulk SMS messages. Ongoing monitoring and recording of student feedback leads to further refinement of this type of support.

The dynamic interplay of recording data, analysing and interpreting information, responding through targeted pro-active interventions and checking that the interventions are having the desired effect, shows that managing records is a process.

Data usually consist of “raw materials” which need to be analysed, interpreted and converted into meaningful information for recipients. Records are data that have been captured in a structured way that is meant to be most useful for those who generate and use them. Information culled from relevant and up to date records is critical to the decision making process. Retrieving records for future use is as important as documenting what happened. This flow of information is the lifeblood of any record system, and has to be managed carefully to make the desired impact on future actions.

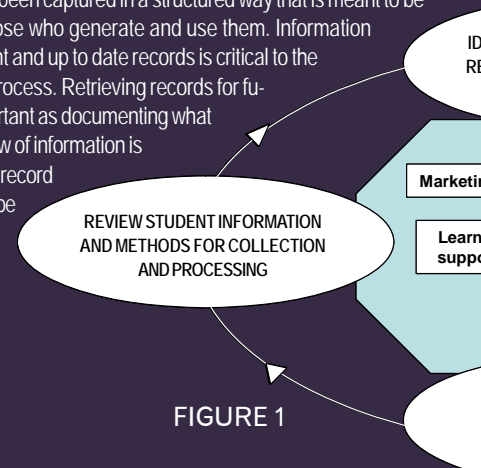


FIGURE 1

Accurate records can positively impact learning and teaching environment

STUDENT RECORD MANAGEMENT

Designing, developing, implementing and maintaining a student record system is not a one-time activity. For example, assumptions about the type of data needed from registration forms to extract meaningful student profiles may initially be too ambitious and comprehensive, or too lean and provide insufficient data, and must be re-evaluated.

Some potential uses of records within the institution may initially be overlooked, and expensive resources used for a primary purpose only, when they could serve multiple purposes. For example, a financial record system that tracks student fee payments is designed for the use of programme managers. As part of its tracking, the system lists students who are behind in their payments and the extent of the arrears. This information can be passed on to tutors, who can play a part in helping to recover the outstanding fees.

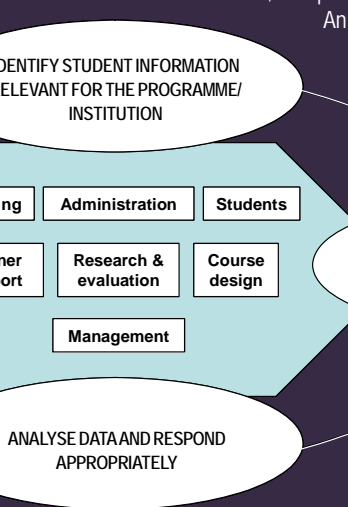
The challenge of student record management is to develop a clear overall picture of “who needs what” information, by when, how they will use it and what consequences follow [Figure 1].

RELEVANT INFORMATION

First identify the record system's users, then establish the information they might want to extract:

- **Marketing:** May expect a list of the people that have enquired about a course or programme. This would help them draw up a profile of potential students to develop a more focused and informed marketing strategy.
- **Management:** May need records that show how many course enquiries were made, and how many of these translated into actual registration. Another set of records might show how many students actually started courses, and how many successfully finished them. Any student-related records can be included as part of a Management Information System (MIS). Interpreting this data may lead to a review of the institution's systems, or a rethink of the courses offered.
- **Administration:** Needs to track materials, assignments, examination registration and contact session attendance. The educational team would also be interested in these records, to gauge student course participation.
- **Course designers:** Need student profiles to help design courses. The examples and activities used, the structure of the materials and the overall teaching strategy of a course is linked to the student profile. Access to a record of difficulties that students are experiencing allows course designers to evaluate and make necessary improvements.
- **Tutors:** Can use and can significantly contribute to records that track data about assignments; contact with students; attendance of students at contact sessions; and learning difficulties experienced by students, including problems with the materials.
- **Students:** May wish to access assessment records, or a general student database, to help form study groups and to establish informal contact.

An institution's educational and administrative team can use records to monitor student progress. Student records can also feed into an overall evaluation strategy for the institution's systems. Education theorist Richard Freeman suggests



that monitoring should be limited to areas and functions where short-term changes can be made, while evaluation is concerned with future or long-term changes.

HOW MUCH DETAIL, AND HOW TO USE IT

An enduring difficulty is determining how detailed the record system should be, and how the data can be used most effectively. For example, an institution may want to identify the early warning signs of a distance learner in the process of becoming discouraged and dropping out. Student pulse rates may rise steeply every time they think about assignment deadlines, but recording this is obviously neither relevant nor feasible. More relevant indicators may be a demanding job, pressure from family and friends or lack of a learning-friendly everyday environment.

The Open University, United Kingdom recently conducted a survey to determine the type of information it would need to form an effective, pro-active intervention plan for retaining students. The survey found that:

- Students most likely to drop out should be targeted for information. Often, data is collected from students who are responsive and not at risk.
- Information collected should reveal when students leave the institution. Patterns of withdrawal should be recorded at different points, such as at registration, submission of first assignment, submission of subsequent assignments and registration for examination.
- Information collected should enable decision-makers to design suitable interventions.

Of course, each institution must individually determine the kind of information they need to glean from their student records.

The Namibian College of Open Learning (NAMCOL), which offers secondary and selected vocational courses, developed an annual statistical digest containing the following quantitative student data:

Personal information:

- Learner occupations.
- Gender of learners, by age and by programme.
- Regional distribution.

Enrolment information:

- Subject enrolment (to compare learners at NAMCOL with those in other schools).
- First time and re-sit subject entries (many learners who fail in the school system enrol to re-sit the examinations).
- Total enrolment.
- Regional distribution of enrolment (Northern, North Eastern, Central and Southern regions).
- Enrolment per programme offered.
- Average learner enrolment (number of courses).
- Full-time equivalent learner enrolment.
- Learner dropout numbers.

Assessment information:

- Examination results per subject and programme.
- Comparison of full-time learners in schools, with NAMCOL learners.
- Assignments submitted for marking, by subject and level.

NAMCOL's institutional vision and values informs the type of data selected for the digest. A state-supported institution, its mission is to “provide wider access to quality educational services for our learners and other customers using a variety of open learning methods.” Based on accurate feedback in key identified areas and supplemented by qualitative input from part-time tutors and heads of centres, the annual digest helps the NAMCOL regional team and head office review its performance and make ongoing decisions.

RECORDS

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COMMON TYPES OF RECORDS TO KEEP

There are critical types of student records commonly kept by distance education institutions [*Table 1*], although the detailed information each institution extracts from them may differ. Generally, the student record system should collect both quantitative and qualitative data.

COLLECTING AND PROCESSING

Institutions usually use a combination of manual and computerised methods to collect data, but technology is only as good as the people who use it.

DISTINGUISH DIFFERENT DATA TYPES

The student record system should encourage both formal and informal data collection to fill in information gaps. Centrally collected data can often only identify trends and major problems, which the institution will have to address at a later stage. However, tutors are well positioned to collect informal data about their students that they can act on relatively quickly.

INTEGRATE SYSTEMS

Institutional data collection systems are not always central or integrated. For example, an institution may have separate databases for enrolment and examinations. Integrating data collection systems will simplify access, avoid duplication of collected data and create a multi-purpose system. At NAMCOL, the student record system is integrated with the management information system so that the various collected data can be easily collated for access, use and analysis by all researchers and staff.

KEEP IT SIMPLE

A record system is also a communication system, and basic principles of good communication apply, such as creating clear instructions and methods for collecting data. The system should demand as much data as necessary, but should be as streamlined as possible. Data should also be entered into

the system as soon as possible; for example, timely data that identifies the profile of students in need of encouragement or advice in their learning can be critical to the success of an institution's current retention efforts.

USE DATA JUDICIOUSLY

Users must know how to interpret data. Both quantitative and qualitative information are needed. For example, a low percentage of assignment submissions is a "red flag" for further investigation. The problem may not lie with the students, but rather with the nature of the assignment or lack of support from the materials or tutors.

TRAIN RELEVANT SKILLS

Training people to interpret data, and helping them to develop the confidence and initiative to respond appropriately, is as important as knowing how to handle the technical aspects of collecting and processing records. Staff that

TABLE 1: CHECKLIST FOR STARTING OR REVIEWING A STUDENT RECORD SYSTEM

| RECORDS | POSSIBLE QUESTIONS | POSSIBLE DETAILS |
|--|---|---|
| PERSONAL STUDENT PROFILE | <ul style="list-style-type: none"> WHAT KINDS OF STUDENTS ENROL? WHERE ARE THEY FROM? HOW MANY HAVE ACCESS TO MOBILE PHONES? HOW MANY HAVE ACCESS TO COMPUTERS, EMAIL AND THE INTERNET? | <ul style="list-style-type: none"> FULL CONTACT DETAILS, INCLUDING MOBILE PHONE NUMBERS. MEANS OF IDENTIFICATION. DEMOGRAPHIC FACTORS, I.E. AGE, GENDER, GEOGRAPHIC LOCATION. RESOURCE FACTORS, E.G. PLACE OF LEARNING, AVAILABLE LEARNING TIMES, ELECTRICITY ACCESS, MEDIA AND TECHNOLOGY ACCESS. PRIOR LEARNING AND EXPERIENCE, QUALIFICATIONS, DISTANCE LEARNING EXPERIENCE, LANGUAGE ABILITY. SPECIAL EDUCATIONAL NEEDS. OCCUPATION AND WORK HISTORY. LEARNING MOTIVATION. |
| RETENTION AND DROPOUT | <ul style="list-style-type: none"> HOW MANY STUDENTS ARE COMPLETING THE PROGRAMME (COMPLETION RATE)? HOW MANY STUDENTS COMPLETE THE PROGRAMME AND GRADUATE (THROUGHPUT RATE)? DO DEMOGRAPHIC TRENDS SHOW DIFFERENCES BETWEEN ENROLMENT AND SUCCESSFUL PROGRAMME COMPLETION? | <ul style="list-style-type: none"> NUMBERS OF ENROLLED STUDENTS. NUMBERS AND NAMES OF STUDENTS WHO DROP OUT. |
| FEE PAYMENT | <ul style="list-style-type: none"> WHAT IS THE STUDENT FEE RECOVERY RATE? | <ul style="list-style-type: none"> NAMES OF STUDENTS WITH FEES OWING. AMOUNT OUTSTANDING. DUE DATE. |
| MATERIALS DISPATCH | <ul style="list-style-type: none"> WHAT IS THE RATE OF SUCCESSFUL MATERIALS DELIVERY? WHAT ARE THE MOST COMMON MATERIALS DELIVERY PROBLEMS? | <ul style="list-style-type: none"> NAMES AND ADDRESSES OF STUDENTS. DATE MATERIALS WERE SENT. DELIVERY MODE (INCLUDE POSTAL REFERENCE NUMBER IF NECESSARY). NUMBER OF NON-DELIVERY COMPLAINTS. |
| STUDENT PARTICIPATION AND PROGRESS (THROUGH CONTACT SESSION ATTENDANCE, ASSIGNMENT SUBMISSION AND ASSIGNMENT RESULTS) | <ul style="list-style-type: none"> HOW MANY STUDENTS ARE INACTIVE (NOT PARTICIPATING IN CONTACT SESSIONS, NOT HANDING IN ASSIGNMENTS)? HOW MANY STUDENTS ARE AT RISK (PARTICIPATING BUT FAILING FORMATIVE ASSESSMENT)? WHAT IS THE ASSIGNMENT TURNAROUND TIME? WHAT ARE THE MOST COMMON DELAYS FOR RECEIVING STUDENT ASSIGNMENTS? | <p>CONTACT SESSION ATTENDANCE:</p> <ul style="list-style-type: none"> NUMBER OF ATTENDING STUDENTS (PER SESSION, ACROSS ALL SESSIONS). ATTENDANCE BY INDIVIDUAL STUDENTS (PER SESSION, ACROSS ALL SESSIONS). <p>ASSIGNMENT SUBMISSION (FORMATIVE ASSESSMENT):</p> <ul style="list-style-type: none"> DATE ASSIGNMENTS RECEIVED. DATE ASSIGNMENTS MARKED. DATE THAT MARKED ASSIGNMENTS ARE RETURNED TO STUDENTS. REASONS FOR DELAY IN RECEIVING ASSIGNMENTS FROM STUDENTS. <p>ASSIGNMENT RESULTS (FORMATIVE ASSESSMENT):</p> <ul style="list-style-type: none"> INDIVIDUAL ASSIGNMENT RESULTS. GROUP ASSIGNMENT RESULTS. |
| STUDENT COMPLAINTS | <ul style="list-style-type: none"> WHAT ARE THE MOST COMMON COMPLAINTS? WHAT IS THE COMPLAINT RESPONSE RATE? | <ul style="list-style-type: none"> NATURE OF THE COMPLAINT. NAME OF THE PERSON RECORDING THE COMPLAINT. DATE OF COMPLAINT. ACTION TAKEN. WHEN THE ACTION WAS TAKEN. |

understand the value and meaning of their contribution will be more committed to participate. A staff orientation should show people how they fit into the record management system, and what they are expected to do.

USE YOUR TUTORS

Open learning educator Jo Tait suggests that institutions should intentionally use tutors in a student retention strategy. For example, tutors can maintain a log of student contact that can be linked with the institution's management information system, creating a broad student profile that can help predict at-risk students and trigger targeted, timely interventions.

RESPOND QUICKLY TO ISSUES

The continued participation of students and staff in record keeping depends directly on their seeing timely results. An optimum turnaround time for action is difficult to specify, but in situations where there is a response delay the institution should keep staff and students informed of progress through newsletters, e-mailouts and meetings.

THE "RIGHT" INFORMATION

Whether the student record system is part of the institution's quality assurance processes or not, planners and decision-makers responsible for an integrated record keeping, administrative and evaluation system must ensure that:

- The right information is captured. [Table 1]
- The right methods are used to collect and process data, and to distribute the information. [Figure 1]
- The right actions are taken to correct the situation.

The focus is on using the most suitable methods for collecting data, translating the data into useful information and taking corrective actions. Data collection can be a formal study or research project, like The Open University's student retention study. Collected data can be incorporated with other information systems and processed as a series of useful statistics, like NAMCOL's statistical digest. The corrective action taken can be quite simple, such as the University of Pretoria's SMS messaging project.

When thinking about how to implement an effective, streamlined student record system, planners should try to use existing administrative, monitoring and evaluation systems to avoid unnecessary task duplication.

EVALUATE THE EXISTING SYSTEM

When evaluating the existing student record system to see if it is working as planned, and if changes are needed, ask:

- How frequently should evaluations occur?
- Who is responsible for the evaluation?
- What clear, agreed criteria are the evaluations based on?
- What happens with the evaluation results?

Research and evaluation can be outsourced, a viable option especially for institutions setting up a student record keeping system for the first time. Outsourcing must be constantly managed by the institution to ensure that the external agency is following clearly defined terms of reference.

DESIGN OR UPGRADE THE INFORMATION SYSTEM

- Who should be involved in identifying what is relevant student information?
- Who is responsible for establishing and maintaining the information system?

Can the existing information system:

- Produce reports on learner participation and progress?
- Produce reports on throughput and completion?
- Track how student queries and complaints are handled?

EXISTING ADMINISTRATIVE PROCEDURES AND PRACTICES

Are adequate procedures in place:

- For student registration?
- To track materials dispatch?
- To record student assignment submission and turnaround time?
- To track fee payment?
- To co-ordinate the student record-keeping system, that is, to collect and collate the data, and to communicate the information to the relevant departments?

TUTOR INVOLVEMENT

- What kinds of monitoring and record keeping should tutors do?
- How will tutors collect the data?
- What happens to the collected data?
- Who is responsible for acting on the results?

CONCLUSION

The administrative and educational activities within distance education programmes are closely linked. Educators often underplay the value of keeping student records, yet accurate records, interpreted as meaningful information, can significantly and positively impact the quality of the learning and teaching environment.



CAPTURING THE RESULTS OF ASSIGNMENTS SENT IN BY STUDENTS ON A DISTANCE EDUCATION IN-SERVICE TRAINING PROGRAMME AT THE INSTITUTE DE APERFEIÇOAMENTO DE PROFESSORES (IAP) IN MAPUTO, MOZAMBIQUE

CREDIT: CHRISTINE RANDELL

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MANAGING STUDENT RECORDS IN DISTANCE EDUCATION

Written and researched by Christine Randell, Education Consultant, South Africa

The Knowledge Series is a topical, start-up guide to distance education practice and delivery. New titles are published each year.

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Commonwealth of Learning, 1055 West Hastings, Suite 1200, Vancouver, BC V6E 2E9 CANADA
 PH: +1.604.775.8200 | FAX: +1.604.775.8210 | E-MAIL: info@col.org | WEB: www.col.org