STUDENT RETENTION ISSUES IN THE ONLINE MASTER OF DISTANCE EDUCATION (MDE) - AN EVIDENCE-BASED APPROACH

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Introduction

Against the background of existing research on student retention (Tinto 1993) it is commonly stated that retention in open and distance learning (ODL) contexts is poorer than in conventional higher education. Woodley & Parlett (1983), Peters (1992), Kember et al. (1992), Moore & Kearsley (1996), Muilenburg & Berge (2001), and Gibbs (2003) contribute to and reflect on these research findings.

Comparisons on retention issues in conventional higher education and ODL contexts often are descriptive and remain on the surface. They do not carefully take into regard that students in open and distance learning are quite different from students in conventional contexts and that institutional settings in most cases are quite different as well. A few of these differences are: (i) Conventional institutions in higher education require formal entrance qualifications, whereas institutions in ODL allow for open access and do not select their students based on formal entrance requirements; (ii) Most institutions in conventional higher education provide three- to four-year campus-based programs for full-time students. ODL institutions offer a greater variety of programs to students who are primarily working adults and study part-time; (iii) Students in conventional higher education settings combine their courses of study with interests in campus-based social life experiences, whereas students in ODL usually study on top of work and family commitments.

Hence, the social dimension of learning must be re-considered in the structurally different contexts of ODL. An important contribution to better understand the affects of external constraints and interfering variables on student retention is Gibbs' recent summary on "the content and outcomes of a symposium entitled 'Student retention in Open and distance learning' held in Cambridge, England in May 2003". Inspired by this the authors reflect on the online Master of Distance Education (MDE) program to exemplify the relevance of a deeper analysis into retention issues of adult learners in open and distance education contexts in general and in the MDE in particular. The findings, indications and new hypotheses as a result of this case study ask for an extended and new approach preferably derived from biographical data. The relevance of such a wider and more differentiated approach is seen as crucial from a program administrator's point of view and covers a wide range of concerns including students' satisfaction as well as cost recovery issues. Ultimately, this precise insight into student retention will allow for appropriate institutional interventions to improve program quality in general and students' retention in particular.

A brief description of the MDE

The MDE was launched in January 2000 by the degree granting University of Maryland University College (UMUC) in partnership with Carl von Ossietzky University of Oldenburg. The program is completely accessible online. It is designed for adult learners who are or intend to be involved in distance education within the educational, business, government, and not-for-profit sectors. Graduates of the MDE are prepared to engage in the planning, design, implementation, delivery, and support of distance education and distance training programs. In consequence, the MDE takes a more multidisciplinary approach by seeking an appropriate balance between the pedagogical, technological,

and economic aspects of distance education, and the broader theoretical, historical, and social views of this field (Bernath & Rubin 2003).

Having offered its first course in Spring 2000, the MDE has grown to a global student body representing 38 different states and 12 nations within its first three years. A total of approximately 1,800 course enrollments in 97 sections of a total of 18 courses occurred between Spring 2000 and Summer 2003. As of Summer 2003, 27 Master degrees and 114 fully integrated graduate certificates in distance education to a total of 70 students were awarded. The students come from very diverse backgrounds. Almost all work full time. Their present employment includes higher education, corporations (often in a training capacity), government and non-profit organizations (again, often in a training capacity), and military, with a small minority from the K-12 education sector.

Data about MDE students are available from UMUC's information-management system ADAM, from standardized course evaluations and additional program-specific evaluations that have been administered from the beginning of the program in Spring 2000 by the partnering institutions. Some of the related data and interpretations have been published (Bernath & Rubin 2003, pp. 32-40).

Approaching retention issues in the MDE

Retention has not yet been a major issue for the program directors as the program has only recently matured towards the graduation of its first students. What has been in the fore were analyses on the goals of program beginners with respect to courses and scheduling, course evaluations with respect to student satisfaction, and studies particularly geared to reflect on the quality of the interaction between the faculty and their students as well as between the students themselves in the online classes which are in most cases designed as virtual seminars (cf. Bernath & Rubin 2003, pp. 10-19). Furthermore an exemplary cost analysis of the development and presentation of courses has been conducted by Hülsmann (2003).

The online MDE provides a rather unique context for studying at a distance. A total of about 640 students have entered this program between January 2000 and Summer 2003. In the following Fall 2003 semester only 187 of these beginners re-enrolled in other MDE-program courses. During this time 27 graduates have successfully finished their studies. The question of interest is now: What has happened to the students who began between Spring 2000 and Summer 2003 and did not appear in Fall 2003 as course takers. We'll break down the numbers by identifying groups of students as follows:

640 students joined the MDE between Spring 2000 and Summer 2003 only 187 students enrolled in Fall 2003
453 missing students in Fall 2003
Consider the potential for dropping out after successful completion of course, certificate, or program: - 27 graduates; - a portion of 70 students who earned a certificate and achieved their goal; - a portion of 50 students who entered the program through a course other than the beginner's course and achieved their goal by choosing this one course; - a portion of 140 students who successfully finished the beginner's course and did not re-enroll in any other course of the MDE program (which comprises beginners who claim that they do not aim at a certificate or a degree and may have achieved their goal by taking just one - the beginner's - course).
Consider the potential for dropping out after failing to achieve a goal in a course or the program: - 78 students who withdrew from the beginner's course within the first four weeks; - a portion of 13 "dissatisfied" students in the beginner's course; - a portion of 127 students who withdraw from other courses than the beginner's course; - a portion of 76 cases where students were "dissatisfied" in other courses than the beginner's course.
approx. 100 remaining students who take a break or either belong to the group of satisfied or dissatisfied students and dropped out for other reasons good or bad...

We will try to find answers and hypotheses for deeper insight into the retention issues of the MDE program. Along with these hypotheses and answers, the limitations and possibilities for institutional interventions to control student retention will become clearer.

There is sound evidence that the adult students in the online Master of Distance Education program are extremely heterogeneous with respect to their educational goals and ways to achieve them. A standardized drop-out questionnaire would most likely fail to deal with the diversity of these aspects. We therefore decided to approach this complex issue step by step by seeking possible explanations based on evidence from evaluations and available student data as well as from our observations as program directors and teachers in the program..

Analyzing registration and enrollment numbers

Students interested in the MDE are strongly recommended to start with the beginners' course *Foundations of Distance Education (OMDE 601).* Data show that more than 90 % (N=590) of all new participants actually take this course.

Approximately 50 students between Spring 2000 and Summer 2003 entered the program and did not take the beginners' course. About 50 % of these were students from other universities who picked one course in the MDE program and transferred these credits into their original programs. The other 50 % are not as well known to us. It is not clear if these students were interested in only one course, in a set of courses, or even in a certificate or the whole MDE program. These students have not been tracked so far. According to McGivney (1996) there is a high risk when making a wrong course choice at the start. With this in mind we estimate that the following analysis may be influenced by approximately 25 students, who belong to this group but cannot be distinguished from the group of students who started with the beginner's course and who will now be analyzed.

The total number of students who enrolled in the beginners' course, OMDE 601, since the program started in Spring 2000 through Summer 2003 is 590. As mentioned above only 187 students became active course takers in Fall 2003. Obviously, 403 (590-187) students did not re-enroll in Fall 2003. The total number of missing students is even higher (428) when the 25 above mentioned students who entered the program through another than the beginner's course are added. On the other hand, 27 of these 428 students are Masters graduates who finished their studies until Summer 2003. This leaves us now with 401 (428-27) students unaccounted.

Withdrawals before the course started

Student statistics show that a total of 78 students withdrew in the first weeks of the 15-week long *Foundations of Distance Education* courses and must clearly be regarded as drop outs. Of these 78, some never entered the virtual classroom, others entered the class but never contributed a posting and a few were active during the first weeks of the course until they withdrew in the fourth scheduled week at the latest (based on the refund schedule for course withdrawals).

In a few cases students explained their decision to withdraw from the *Foundations of Distance Education* course with personal and mostly family or job related reasons. Typical statements of this kind are: *"I am not planning to continue in the program, and am taking steps to withdraw from it due to added time pressures from my job. Thanks so much for a fine course, or at least the portion of it that I experienced." or "Dear Faculty and Fellow Group Members, Due to extenuating circumstances, I have not been able to keep up with the course load and thus, I have, today, officially withdrawn from the given course. ...".*

The numbers of so-called non starters are small: A total of 78 from Spring 2000 through Summer 2003 is an average of 11 cases in each semester. It would be of particular interest to learn what kind of institutional interventions would be necessary beyond the supporting services already provided such as *Getting Started in the MDE,* a preparatory package accessible online prior to registration. Gibbs (2003, p. 46) states that "the greatest component of drop-out in many ODL systems happens before students have engaged in their course: they register and then don't really start." One of the reasons is the fact that access to ODL programs is open and has a low financial risk. This statement can be applied to the MDE, however the 13.2 % (78/590) of early "withdrawals" in the MDE do not represent "the greatest component" when compared to all "missing" students. In order to see how big the component of all drop outs in the MDE context really is, we must continue to track the other 323 (401 – 78) still "missing" but not yet identified students.

Not re-enrolling after the successful completion of the first course

We learn from UMUC's student information system that 37 % of all students don't take other courses after the *Foundations of Distance Education* course. 37 % of 590 are 218 students. This number includes the 78 withdrawals. The remaining number of students is 140 (218-78) representing those who successfully finished the *Foundations of Distance Education* course but do not re-enroll in any other courses of the MDE program. How can this drop-out phenomenon after the first course be explained? Analyzing available data from questionnaires and standard evaluation as well as observations in classes may help to find the answers or appropriate hypotheses with respect to this particular group of students.

Data drawn from a MDE questionnaire

Immediately after the start of the *Foundations of Distance Education* course students receive a questionnaire and are asked to express their initial intentions and plans in the MDE program (*Do you plan to participate in the MDE program towards graduation with a Masters degree?*). The results of all questionnaires show that about two thirds of all beginners in the MDE program aim at a Master's degree, close to 20 % aim at a certificate, and between 10 and 15 % are undecided. The same questionnaire is administered at the end of the course in order to see if the experiences of their first course cause any change in their plans. The comparison of results in all semesters shows that there is little change with respect to the overall goals towards formal qualification, however there is a significant change in the time frame to reach the goals. There is a shift from two and three years to a four year plan for graduation. This change may also have some impact on the mild shift from pursuing a MDE degree to aiming for a certificate (Bernath & Rubin 2003, p. 29) and it may result in the one or other early drop out.

Clearly the 10 to 15 % (N=88) of undecided students represent a potential for dropping out after the first course. The reasons for dropping out may range between a negative "test" experience to being satisfied with this one-time experience.

Assumptions based on the standardized course evaluation results

UMUC administers a rigorous standardized course evaluation at the end of all of their courses. The weighted average mean of all 50 MDE course sections taught from Spring 2000 through Summer 2002 with a total of 1,123 participating students was 3.92 on a five-point-Likert scale. The (mandatory) evaluation takes place about three to four weeks before the end of the 15-week-long courses. It has been stated (Bernath & Rubin 2003, p. 37) that the *Foundations of Distance Education* course, with a range of ratings between 4.02 and 4.55 and its weighted average mean of 4.17, offers - for most beginners - a highly satisfactory course experience. Only a small percentage of about 3 % (N=13) of all beginners "strongly disagree" with the notion that their personal goals were met by the course. The overall percentage of dissatisfied students in all MDE courses is 4.8 % (N=76). In these cases one can assume that dissatisfaction may lead to dropping out from the program.

The initial question raised in this section was: Why do 140 students not re-enroll in other MDE courses after having successfully finished the *Foundations of Distance Education* course? We identified quite a high number of "undecided" (N=88) and a small number of dissatisfied (N=13) beginners and assume that a reasonable portion dropped out. With this in mind the relatively high number of more than 12 students in each semester who completed the beginners course successfully but don't continue, shrinks to about 5 - 8 for whom it is not obvious why they don't re-enroll. A wide range of intervening factors for dropping out can be taken into regard (cf.. Bernath & Rubin 2003, p. 35). Open-ended questions in the standardized course evaluation as well as in an additional questionnaire that seeks to identify those course elements that contributed most to a successful learning experience offer room for mentioning critical aspects of the course. Some of these critical remarks refer to other than content-related aspects like time constraints, workload and financial

problems, which can not easily be addressed by an institution with a strict semester-course regime, academic policies, and fixed fees.

The question of appropriate interventions does not seem relevant for those students who enter the program and plan to take just one course. It is, of course, extremely relevant in cases where students express dissatisfaction with their first course experience.

It seems that the variety of potential reasons for the 140 students to drop out after the first course leaves only very few students in each semester who have common reasons for their dropping out. It may be more likely that each student denotes a rather unique set of reasons for dropping out, which corresponds very much with the explanations for the success of their peers on the other side of the medal. We have previously shown in detail how each individual student constructs his or her own learning process and how much these students differed in their value judgement about the elements that constitute the teaching and learning process in the online learning context of the MDE (Bernath & Rubin 2003, p. 40).

Drop out of advanced students in the MDE

Some evidence for explaining the drop out of about 140, and prior to this of about 78 students, has been identified. Still, there are 283 students (401-78-140) who did not appear as active students in Fall 2003 after finishing successfully and satisfactorily the first course between Spring 2000 and Summer 2003. We regard these students who finished the beginner's course successfully as 'advanced' students.

Certificate completers

Results from the above mentioned *MDE Questionnaire* show that close to 20 % of all beginners only aim at a certificate. In taking this for granted we can statistically identify about 102 students (20 % of the 512) who successfully finished the beginner's course and may have reached their level of aspiration by earning a certificate. Statistics show that as of summer 2003 114 certificates were awarded to 70 students. Some of them may aim at a certificate and at graduation, which makes it difficult to estimate the portion of 70 students who have completed their program goals and left the program successfully. Let us assume it is just one half (N=35). In this case the remaining number of missing students would now be 248 (283 - 35).

Withdrawals from other courses than the beginner's course

The analysis of course enrollment and withdrawals in all courses of the MDE program shows that there is a total of 127 students who withdrew from one of the six core courses that follow the *Foundations* course. In some cases the rates are remarkably higher than in the beginners' course. Reasons for this phenomenon are manifold and not yet clear. The voice of an advanced student in one of these core courses may indicate unexpected directions for the analysis of circumstances that result in such relatively high numbers: *I wanted to check in with you and [name] to let you know that I just withdrew from all of my OMDE classes this semester. I wanted to thank you both for the information and resources you have given me, and let you know that I really enjoyed the class up until the time I had to withdraw. The reason I withdrew had nothing to do with the class; I just changed jobs and need to focus my efforts on that for a while. I hope to re-enroll in your class in a future semester when I have settled in at work. I had to withdraw so quickly because of the refund policy and I did not have a chance to say "goodbye" to the class. I had wanted to post a note in the cafe. If appropriate, would you post one for me? Good luck with the rest of the semester and I hope to "see" you both again soon.*

With respect to the course evaluation results is was already stated that there are about 4.8 % dissatisfied students (N=76) and it can be assumed that they represent another distinct group of potential drop outs.

If we take both groups - the 127 "withdrawals" (those who dropped out before the course ended) and the 76 "dissatisfied" (those who may drop out after their critical course experience) into account and assume that again just one half drops out from the program we may so have lost another 101 (50 % of 127+76= 203) students and remain at least with 147 (248-101) still missing students.

We know from observation that withdrawals and dissatisfaction does not automatically result in dropping out from the program and therefore had some good reason for the assumption that only 50 % of these two identified groups may have dropped out. For the remaining 147 missing students other reasons must be found to complete the picture.

Not re-enrolling after successful completion of more than one course

The UMUC information system has indicated that a number of students stop taking courses after they complete two, three or even more courses. We estimate that approximately 60 student left the program after taking two courses, 40 students left after taking three courses, and another 20 students left after taking four or more courses (for reasons other than successfully completing a certificate). Thus, the unaccounted students are probably reduced to 27 (147-120). Reasons for these drop outs or stop outs may be similar to those that drop or stop out after just completing one course. These reasons are varied and may also lead to external factors like the economic recession Interestingly, the comparison of the enrollment data showed a significant slump in enrollment numbers in Fall 2002 and Spring 2003. Asking for possible reasons, the war in Iraq came into concern, which affected a number of MDE students in the U.S. military services who were not able to continue their studies. Such temporary interruptions and unforeseen circumstances as well as other home and work life contexts are, of course, beyond the institution's capacity for interventions.

There is also evidence that some of the students who successfully completed the first course in any semester including the Summer term 2003 and who did not re-enroll in Fall 2003 will come back later. Family and work responsibilities may require a pause. The structure of the MDE program allows a break and this phenomenon can be phrased as stop out rather than drop out. The reasons for advanced students to withdraw from a course or stop or drop out of the program are manifold.

Concluding remarks on student retention in the MDE

The micro analysis of student retention in the MDE program shows that large numbers break into smaller ones at different stages of a course of studies. We found that the total of about 40 drop outs in each semester may relate in average to about:

- 2 beginners who never entered the classroom and withdrew from the course;
- 2 beginners who never contributed with a posting to their class and withdrew;
- 3 beginners who became visibly active but withdrew as long as fees are refunded;
- 1 student who may give up after dissatisfaction with the beginner's course;
- 10 students who successfully completed the first course and don't continue in the program;
- 2 advanced students who may give up after dissatisfaction with an advanced course;
- 10 advanced students who withdraw from another than the beginner's course;
- 7 students who may give up for private, work-related and other reasons;
- 3 students drop out after successfully completing a certificate program and thus have reached their personal goal.

It seems helpful to look into these details in order to learn and understand that institutional interventions for improving student retention are limited. We can conclude that there are likely less rather than more situations regarding student's circumstances that can be controlled by the institution, and more importantly, that the number of different cases of each circumstance can shrink to small portions. This makes it difficult to invest in institutional provisions for improving students' retention especially in stand-alone programs of the exemplary size of the MDE. The case may be different, when the program is only a small unit within an institution like UMUC with its fully developed student support service or for much larger programs that might have less personal interaction with the students.

In the end we learned that we needed 590+ enrollments to produce approximately 180 active students. We may possibly influence 20, or perhaps more, by a variety of interventions to re-enroll rather than to stop out for a while or drop out for ever. The expected MDE program completion ratio will be

around 30 - 35% at best. If the number of students that can be influenced by institutional interventions is as small as we suspect, then we will be lucky to raise that by 3%. We therefore anticipate that the cost/benefit of large institutional interventions may not be a great as many predict because of the small numbers that relate to each circumstance. Further research is clearly needed to better assess student's reasons for drop-out and to guide interventional decisions.

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