STUDENT PERSISTENCE AT AND DROP-OUT FROM UNIVERSITAS TERBUKA (THE OPEN UNIVERSITY OF INDONESIA)

by

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ABSTRACT

Drop-out has been a problem at Universitas Terbuka (UT), The Open University of Indonesia. Many efforts have been made to reduce the drop-out rate and to increase student persistence. The purpose of this study was to investigate the characteristics of students who persist and those who drop-out from the UT program. In this study, a persister was defined as a student who had already completed 120 credit hours of courses with a grade point average of not less than 2.0. A drop-out was a student who did not register in any courses for more than four consecutive semesters. Differences in characteristics between persisters and drop-outs were examined.

Individual characteristics, institutional environment and integration, social integration, and goal and institutional commitments were chosen as variables to examine both persisters and drop-outs. Questionnaires were developed around these categories.

The questionnaires were sent to a random sample of 1200 students (400 persisters and 800 drop-outs), with 482 subjects (195 persisters and 287 drop-outs) returning the survey materials. Quantitative and qualitative approaches

were utilized to analyze the data.

In general, individual characteristics such as age, educational background, and employment status tended to be associated with student persistence or drop-out from UT. Both groups of respondents felt satisfied with the academic environment and integration; however, social integration was low in both groups. The most significant indicator that differentiated persisters from drop-outs at UT was goal and institutional commitments. Persisters tended to have a higher level of goal and institutional commitment than drop-outs.

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TABLE OF CONTENTS

page

page

page

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

Background

Student drop-out is a common phenomenon in distance education. The drop-out and withdrawal rates at the tertiary level in distance education, or off-campus courses, tend to be higher than for comparable on-campus courses and are a matter of concern to the providing institution (Kirkwood, 1987). A number of factors might contribute to student withdrawal from studies. For example, students who register for distance education tend to differ from their on-campus counterparts (Thompson, 1989); e.g., they are often older and have jobs and family responsibilities.

Student attrition also has been a problem at Universitas Terbuka (UT) or The Open University of Indonesia. Since the first year of operation in 1984, more than 50 percent of UT students have dropped-out (Bureau of Academic Administration and Student Affairs, 1992). Many efforts have been made to reduce the drop-out rate; for instance, during 1987, UT improved student support services and the academic and administrative system.

Despite efforts to reduce the withdrawal rate, the problem has persisted; therefore, the intent of this thesis is to identify the characteristics of students who

persist and those who withdraw from UT. Further, differences between those individuals who persist and those who withdraw are investigated.

Munro (1987) noted that considerable research has been conducted to understand, predict, and control drop-out rate from distance education institutions, but the findings are rarely generalizable outside the situations in which the research is conducted. Munro further argued that conflicting operational definitions of drop-out make it impossible to draw comparisons between institutions. However, Sweet (1986) concluded that Tinto's model (1975) of student drop-out is an appropriate framework for further research on student drop-out from non-traditional education institutions.

Since there has been no clear operational definition of drop-out in distance education, it is difficult to find commonality across conceptions of drop-out for UT students. Tinto (1975) divided drop-outs into two categories, voluntary withdrawal or academic dismissal. Tinto explained that academic dismissal is most closely associated with grade performance; withdrawal in the form of voluntary drop-out is not. In relation to the study of drop-outs from college, Tinto (1975) suggested the following argument:

> If one wishes to develop a theoretical model of drop-out from college, one which seeks to explain the

> longitudinal process of interactions that lead differing persons to varying forms of persistence and/or drop-out behavior, one must build into the model sets of individual characteristics and dispositions relevant to educational persistence. To do this, it is suggested here that one must include not only background characteristics of individuals (such as those measured by social status, high school experiences, community of residence etc., and individual attributes such as sex, ability, race and ethnicity) but also expectational and motivational attributes of individuals (such as those measured by career and educational expectation and level of motivation of academic achievement). With specific reference to drop-out from higher education, one would need to know the individual educational expectations, and their institutional manifestations, if any (pp. 93).

Universitas Terbuka (UT) differs from other universities in Indonesia because of its instructional methods. UT uses distance education methods in conducting its instruction, through the provision of multi-media and home study courses. UT was designed both to increase educational opportunities for senior high school graduates, who failed to enroll in public universities, and to provide equal opportunities for higher education throughout the country. In the first year of enrollment, the number of places did not match the volume of applicants. The applicants' curiosity about UT, being a new state university with home-based study programs, and the desire to get a university degree may have led them to enroll. Unfortunately, the number of applicants decreased gradually and a large number of students have failed to continue their studies. Besides institutional factors,

such as student support services (Wihardit, 1988), non-institutional aspects, such as student's attributes and personal circumstances, may also contribute to drop-out decisions.

Most UT students are more than 25 years old, with a minority being under age 25 (Bureau of Academic Administration and Student Affairs, 1992). They have family and job responsibilities that compete for time required for study. De Freitas and Lynch (1986) and Laube (1992) found that the amount of time students devoted to study was significantly related to successful course completion. According to Sweet (1986), jobs and family pressures combine to make it difficult for distance learners to have the persistence and commitment that is necessary for successful independent study. As a consequence, distance educators are especially concerned with developing programmes that minimize student drop-out.

From its first year of the operation, 1984, until the end of 1991, UT had 92 765 registered students (not including students from the Faculty of Education). Only 36 277 persisted, and 56 488 dropped-out (Bureau of Academic Administration and Student Affairs, 1992). If this high rate of drop-out continues, the development of future UT programs will be affected. A better understanding of the factors involved in drop-out

decisions should enable UT to develop programs and improve its services to reduce student attrition.

Purposes

The purposes of this study were to investigate the characteristics both of students who persist and of those who drop-out from Universitas Terbuka. Classes of variables most closely associated with both persisters and drop-outs, which were derived from Kember's model of drop-out from distance education, were utilized in this study (see Figure 2). This thesis was not a true test of the model, but rather it was an exploration of it to determine whether any different characteristics exist between persisters and drop-outs within the cluster of variables; the intent was to measure variables associated with the decision to persist or drop-out.

Theoretical Framework

The framework developed for this thesis was modified from the model developed by de Freitas and Lynch (1986) and Kember (1989). De Freitas and Lynch (1986) have identified three dominant factors to account for student success or drop-out from distance education programs: students' characteristics, institutional factors, and non-institutional factors, as presented below.

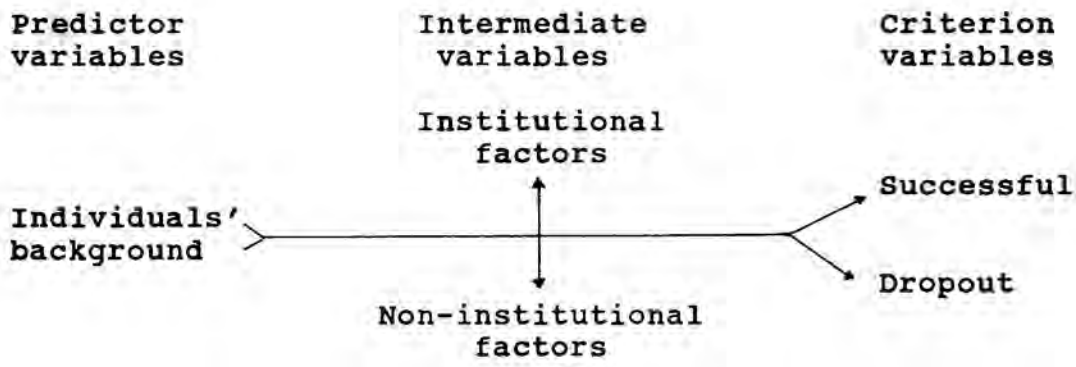

Figure 1. Conceptual model for the study of successful and drop-out students.
Source: de Freitas and Lynch (1986).

Kember (1989) described a model of drop-out, developed for distance education, based upon the model developed by Tinto (1975). Kember's model, as illustrated in Figure 2, consists of seven components that account for student success and drop-out from distance education: characteristics, goal commitment, academic environment, social and work environment, academic integration, social and work integration and cost/benefit analysis. Relevant components of Kember's model that approximate the problems at Universitas Terbuka have been incorporated into this thesis. These components are individual characteristics, goal and institutional commitment, academic environment and integration, and social integration.

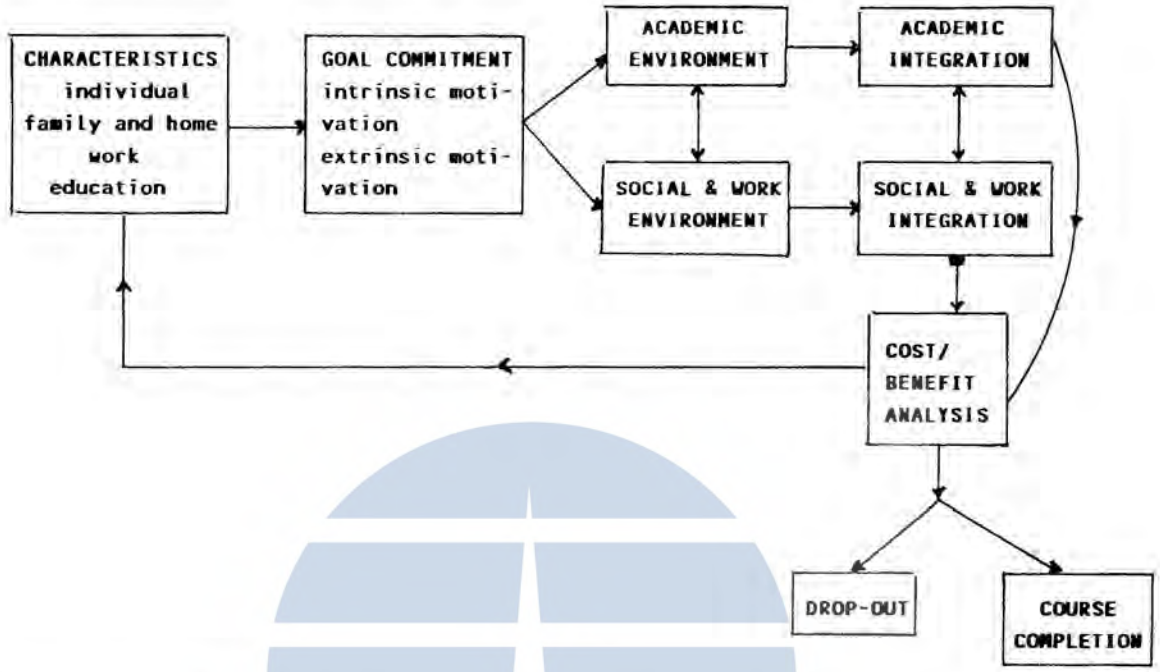

Figure 2. The model of drop-out from distance education. Source: Kember (1989).

Statement of the Problem and Research Questions

In 1986, Universitas Terbuka changed its operational system from a package-credit semester to a full-credit semester. This new system gave flexibility to UT's students in choosing their courses and planning their studies. This flexibility, it was hoped, would improve student services and increase the number of students. However, this new system failed to attract more new students to study at UT; in fact, the number of students decreased. Wihardit (1988) reported that institutional factors such as satisfaction with student support services

were the main factors associated with student attrition at UT.

In 1987, UT modified the system and improved its services to students by giving more authority to regional centers. Since that time, UT has run smoothly, and, as a result, many students have graduated. However, some questions continue to be of concern: Why do some students finish their studies and others fail? Are institutional factors alone the key or do student-related factors also contribute to drop-out? Specifically, the following two research questions were examined in order to begin to address these problems:

1. What are the characteristics of both the students who persist in and those who drop-out from UT programs?
2. In what ways do persisters and drop-outs differ in characteristics?

Operational Definitions

The term of drop-out used in the UT context differs from that found in conventional universities in Indonesia. The concept of lifelong education and almost unlimited space capacity enable a student who already left the program for several years to continue their studies; thus, there is no permanent drop-out from UT. The term of non-active students is officially used at UT rather than drop-

out as the opposite of active students (persisters).

In this thesis, the term of drop-outs is defined as students who do not register for any courses for more than four consecutive semesters after their last registration. Drop-out, non-completion and non-active are interchangeable terms. Persisters are students who still continue their programs and already have completed 120 credit hours of courses with a grade point average of not less than 2.0 out of a possible 4.0.

CHAPTER 2: REVIEW OF RELATED LITERATURE

Research on Student Drop-out

Student attrition in distance education has become a big concern among researchers and educators. Scriven (1991) noted that many of the 23 articles on 'students and their characteristics' were concerned with the problem of student attrition and described the results of studies designed to find the causes of this phenomenon. Although many factors, both institutional and non-institutional, contribute to attrition, there are various steps that can be taken to reduce attrition rates.

Despite these studies, Thompson (1984) has argued that research investigating the problems of drop-out in a distance education program, such as, studying by correspondence, is not based on comprehensive theoretical models. He further explained that the theoretical formulations of Spady, Tinto and Boshier are relevant to such research even though they have not been specifically developed to explain drop-out in distance education.

The distance education drop-out is often seen as a victim of personal or social stress, or of institutional failure. Few distance teaching institutions know what their drop-out statistics really mean in terms of student use of their material and the degree of student satisfaction or dissatisfaction with their courses or

programs. Such information is crucial in order to justify programs to funding agencies (Munro, 1987).

In the remainder of this chapter, six topics are discussed: variations in terms of drop-out, drop-out rates, reasons for dropping-out, distance learners' characteristics, and efforts taken by distance education to prevent student drop-out.

Drop-out Terms in Distance Education

Within distance education institutions, defining the drop-out rate is problematic. Students do not declare either their ultimate goals or the period over which they intend to study making it impossible to say whether non-completion means interruptions or drop-out in the sense of failure (Homberg, 1977). Otherwise, the term of "drop-out" is used very loosely and means different things to different people (Woodley & Parlett, 1983). Non-completion, from the school's point of view, is not necessarily identical with non-attainment of the student's own study goals (Baath, 1984). To some students, course completion is hardly an essential study goal. They want to get something specific from their course and are content when they have obtained that goal. Moreover, the majority of distance education school students enroll continuously and are often allowed to keep a very flexible time schedule. This makes it difficult to determine

exactly when a slow student should be considered a drop-out (Baath, 1984).

To illustrate the degree of variability in student drop-out definitions in distance education, examples from the United Kingdom, Germany and Sweden are presented. Woodley and Parlett (1983), in their report of student drop-out at the Open University of the United Kingdom, proposed four measures of performance which seem most suited to the Open University context.

(i) Non-completion of final registration
This only concerns new undergraduates. The number not completing final registration is expressed as a percentage of those who were provisionally registered on 1 January.

(ii) Withdrawal rate
Students are considered to have withdrawn if they finally registered but did not sit for the end-of-year exam.

(iii) Failure rate
Students are considered to have failed if they sat for the end-of-year exam but did not gain a course credit.

(iv) Overall wastage rate
This is the percentage of students finally registered but who did not gain a course credit. In other words, it includes both 'withdrawal' and 'failure' (pp. 2).

The drop-out rates at FernUniversitat (Germany) are defined as the proportion of full-time and part-time students in a cohort who were enrolled in a given academic year in a fixed course of studies, but who discontinued their program before completing all the exams required for the degree. In Sweden, although the phenomenon of drop-out and pass rates has been widely discussed, there are no

official definitions or guidelines to help planners or researchers when working with these concepts (Bartels & Willen, 1982). Glatter and Wedell in Keegan (1980) defined drop-out and wastage rates as follows:

> Drop-out--the proportion of students who enrol for the course but withdraw before the examination or test.
> Wastage rate--the proportion of students who enrol for the course but who do not complete it successfully, either through withdrawal before taking the examination or through failure of the examination.

In order to make the student drop-out percentage easy to maintain and even useful for the purpose of comparison with other institutions, Robert (1984) proposed the term of drop-out that is taken to include three classes of students:

1. The student who informs the institution that he or she no longer wishes to continue studying;
2. The student who is prevented from continuing studies by the institution because of failure to satisfy regulations such as not meeting standards necessary for minimum rate of progression;
3. The student who disappears and fails to respond to all forms of follow up procedures instigated by the institution. Excluded from this definition of student drop-out are students who request and are granted leave by the institution to discontinue studies for a given period of time (pp. 51).

Drop-out Rates in Distance Education Programs

Drop-out Rates Comparisons

Dropout rates, or to express it positively, completion rates, have been an important aspect of research, either as the objects of the research itself or

as the most significant criterion of success for the independent variables examined in the experimental studies (Rekkedal, 1983). Non-completion rates constitute a more serious problem in distance education than in part-time education based on other teaching/learning methods (Rekkedal, 1983). Levels of drop-out and withdrawal from distance education programmes at the tertiary level tend to be higher than for comparable on-campus courses and are a matter of concern to the providing institutions. Those most at risk are the people experiencing tertiary level study for the first time (Kirkwood, 1987).

According to Rekkedal (1982), meaningful comparisons between drop-out in distance courses and in other courses, as well as between distance courses in different educational systems are difficult to make, partly because of the conflicting definitions of drop-out presented in the literature and partly because, in many studies, drop-out is only vaguely defined. Shale (1982) argued that different methods of counting students can imply very different interpretations of completion rates, even though the formulae by which such rates are calculated are ostensibly identical. Interpretation of completion rates may be strongly affected by institutional admission requirements and registration procedures.

Some distance education institutions do not count

those who do not start their studies (non-starters) as students (Hall, 1984; Rekkedal, 1982). The drop-out rates in these cases are, of course, lower and the pass rate higher than in cases where non-starters are counted as registered students (Bartels & Willen 1985). Baath (1984) emphasized this point when he noted that most of the dropping out normally happens during the very first part of a correspondence course. Non-starters (i.e. students who have registered for the course but who have not sent in one single assignment for correction and comment) are sometimes seen as frequently as or even more frequently than 'real drop-out'.

Because of the variability in counting drop-out rates in distance education, it is difficult to compare the drop-out rates across the countries. However, comparisons among the countries in the same region may be useful to propose here.

Drop-out Rates in Distance Education in North and Central America

Persons and Cathpole (1987), in their study at North Island College, reported that the completion rate for the course was around 70% when all students who registered were counted and as high as 90% if only the students who completed the first assignment were counted. This high rate of completion is predicted as a result of one-to-one

interaction with the instructor available through private telephone calls and teleconferencing. Shale (1982), in his study at Athabasca University, reported that the completion rate over all courses and cohorts is 28.8% if all registered courses were included and 58.2% if non-starters were not counted.

Drop-out is a serious problem in The Universidad Estate a Distancia (Costa Rica). There are no clear data about drop-out rates, but the percentage can be estimated from the registered students per cohort. Greville and Rumble (1982) reported that drop-out varied between 55% and 74% of the cohort. The causes of drop-out are complex. As many as 28% of students said they could not find sufficient time to study, and 13% said they did not like studying at a distance.

Keegan (1991) reported that there was a 55% non-completion rate in the Department of Independent Study at the University of Florida, USA; however, there were no adequate data to distinguish those who have permanently dropped-out from those who have temporarily discontinued their studies. A relatively low non-completion rate (32.2%) was reported by Taylor et al. (1986) in their study at the Open Learning Institute, Canada.

Two ways of counting drop-out rates were commonly used in distance education in North America. The drop-out

rates in this region vary between 30% to 74% if all registered students were included and between 10% to 42% if non-staters were not included.

Drop-out Rates in Distance Education in Europe

Relatively high completion rates have been reported in the Distance Education Department of the University of Leipzig (Germany). Around 70% of students completed the 'diplom' within the allocated time of 5.5 years. When drop-outs occurred, it was found to happen especially at the beginning of the courses (Keegan, 1991).

The Open University of United Kingdom (OUUK) has largely solved the drop-out problem by structuring the system to prevent avoidable drop-out, such as by taking the following steps: 1) identifying students who are at risk; 2) providing a wide range of student support services; and 3) providing a personal tutor-counsellor and a variety of optional and compulsory contact activities. The OUUK structure has been a feature of many other distance education systems for adults. The OUUK result is that about 50% of every cohort graduated (Keegan, 1980, Keegan, 1991), and the drop-out rate per course averaged around 21% (Kennedy and Powel, 1976).

A very low completion rate occurred in the NKI School, Norway, reported by Rekkedal (1982). The status of students who enrolled in 1972-73, after two and a half

years of enrolment, was that 84.8% had discontinued, 3.0% were still active, and 12.2% had completed their courses.

The drop-out rates in distance education in Europe have been varied across countries. For the institutions which have made an effort to prevent student drop-out, such as those in Germany and United Kingdom, the drop-out rates were relatively low. On the other hand, the very high drop-out rate was also reported from this region, such as that which happened in the NKI School in Norway.

Drop-out Rates in Distance Education in Australia, Asia and the Pacific Rim

The trend of completion rates in open universities varied, depending on the type of course and support services provided. The Department of External Studies of the University of New England, Australia, is one example of distance education system that has had relatively high completion rates due to the provision of student support services. About 82-85% of the students who submit for final assessment are successful (Keegan, 1991). The keys to the success of this high rate are as follows:

1. Compulsory residential summer school for each unit;
2. The obligation on distance students to see their university and enjoy a brief period of traditional university life as a full time student in residence;
3. Optional weekend seminars;
4. Visits by full time faculty to student groups or to individual student on farms;
5. Distance students being brought into contact with

> the best brains of the university and not just part time staff (Keegan, 1991, pp. 203).

Taylor et al. (1986), in their research at several open universities, reported the completion rates in certain courses as follows: Alabama Iqbal Open University (90.7 %), Darling Down Institute of Advanced Education (53.5%), Tasmanian States Institute of Technology (45.8%), and University of the South Pacific (43.8%). The course completion rate at the Central Broadcasting and Television University in China is very high as measured by "examination passed" rates. At the end of 1979, 80% of the 500 000 candidates passed (McCormick, 1982).

An examination of student registration at Universitas Terbuka, Indonesia revealed that most UT students did not register consecutively from the first to the fourth semester. Only 60.5% registered regularly from the first to the fourth semester (UNESCO, 1988).

In general the drop-out rate in the region of Australia, Asia, and the Pacific Rim was relatively low (between 17% and 56%) if compared to those of other regions. Bartels and Willen (1985) argued that, because the term "drop-out" has different meanings in different systems of distance education, it is difficult to compare the drop-out rates of two or more distance education universities. The comparison of drop-out rates at distance teaching universities requires information about

the bases of comparison. Most often inappropriate comparisons are made unless the bases of drop-out comparisons have been provided (Bartells & Willens, 1985).

Reasons for Dropping-out

Pitcher and Blaushild (1970), cited in Maxwell (1979), listed ten reasons for academic failure: lack of potential; inadequate conception of the work involved in succeeding; importance of other activities over studies; interference from psychological problems; failure to assume responsibility for learning; inhibition of language function (poor reading, writing and speaking skills); lack of standards for high quality performance; selection of an inappropriate major; vagueness of long term goals; and selection of the wrong college. More generally, four types of reasons have been associated with drop-out: job and family responsibilities, assignment completion and institution commitments, course difficulties, and learning behaviors.

Jobs and Family Responsibilities

Most research on student drop-out has attempted both to investigate the factors affecting student drop-out and to find the key factor for increasing student persistence and decreasing attrition. Students, quite naturally, will tend to ascribe the reasons for their actions to outside forces, such as job pressures, rather than to

such personal factors as lack of motivation, preparation or ability (Kennedy & Powell, 1976). One of the biggest problems faced by first time students in such an environment is the absence of peers. While this is a serious academic problem, given the importance of interaction and exposure to different perspectives on issues, it is of even more fundamental concern in terms of student persistence (Paul, 1991).

Considering the typical student body of a distance education organization (adults with families, jobs and various commitments), it is not surprising to find that five common reasons have been given for discontinuation: the pressures of family and of duties, work commitments, travel, illness, lack of time (Holmberg, 1989). Jobs and family pressures are the most common reasons (Baath, 1984; Hall, 1984; Hezel & Dirr, 1991; Rekkedal, 1983; Suciati, 1990; Unesco, 1988). From the students' viewpoint, jobs and family responsibilities compete with the time that can be allocated to studying. Distance learners must assess not only how much time they will need to devote to their academic work, but also what periods of time they have available for study purposes during each day of the week (Hezel & Dirr, 1991).

Assignment Completion and Institutional Commitments

Completion of written assignments as a demonstration of learning has been suggested as an index of student persistence (Munro, 1980). Wong (1979) studied the relationship between assignment completion and the attrition rate. Students who submitted more than half of the total number of assignments were significantly more likely to complete the course. Furthermore, for those who completed the course, the more assignments they completed the higher the final grade tended to be. Suciati (1990), in her research at Universitas Terbuka, found that students who expected to obtain a high GPA tended to do the self-test more frequently. There was also a positive correlation between persistence and achievement factors. Students who did the self-test were likely to have a higher average test score. Students who intended to register for the following semester were also likely to have a higher score.

In relation to assignment completion, the role of the tutor was very important. The delay in returning student assignments caused discouragement. The most frequent reason for dropping out given by the students was that they had to wait too long for the return of their assignments (Harter cited in Baath, 1984). A similar reason reported by Wihardit (1988) was that the wait was

too long for the announcement of examination results. This was one of the reasons given for UT students not registering in the following semester.

Course Difficulties

The majority of distance education students are adults who are enrolled part time. They have been away from school for several years and live considerable distances from their tutors and their universities. Course materials for distance learners have been designed in certain ways to meet the needs of this special clientele. However, many of these students find it hard to understand such course materials. This lack of understanding has been reported as one of the main reasons for dropping out (Baath, 1984). Amin (1990) reported that the reasons for course non-completion at UT were twofold: 1) the volume and difficulty of the self-study materials provided; and, 2) the difficulty of mastering an unguided self-study system, leading to loss of confidence and discouragement after repeated examination failure. Students' difficulties in understanding course materials at UT were also reported by Suciati (1990).

Learning Behaviors

Patronage and an oral tradition have influenced the attributions made by distance learners in a traditional society (Murphy, 1991). From his research on problems

with the learner at Universitas Terbuka, Dunbar (1991) reported that there are two basic reasons for student disenchantment.

> The first reason is that the model of distance education imported by UT assumes that students are capable of autonomous learning behaviors, and that, on entry, they are psychologically prepared for the personal demands imposed by a teacher-independent, self-study regime. Yet Indonesian society is strongly heteronomous, and learners are acculturized from primary school to avoid behaviors or statements which may be construed by others to be expressions of personal autonomy. The second reason, linked to the first, is that the exclusive use of textbook-based mediation in the UT instructional system may not suit students acculturized in a process of education which emphasizes oral communication, in a society with a continuing oral tradition (pp.170)

Even in societies where there is less emphasis on oral communication, the demand of autonomous learning behaviors in a distance education program can result in a sense of isolation. Waangdall in Holmberg (1989), in a Swedish study, showed that 24 per cent of the drop-outs considered their failure to be due to incapacity to study in isolation.

Characteristics of Distance Learners

According to Tinto (1975), students bring to college such characteristics as family background and personal attributes and experience, each of which is presumed to influence not only college performance, but also initial commitment levels to both the institution and the goal commitment. A characteristic of distance education is

that the student body tends to be more heterogeneous than its on-campus counterpart (Kirkwood, 1980). At least until recently, demographic profiles of students in open learning institutions have been remarkably consistent.

General Characteristics

Distance Education Services, University Extension, University of Victoria (1990), defined distance learners as adults, with professional responsibilities (jobs) and social responsibilities (families), usually studying part time. They may have limited formal education or have been away from formal education for some time. They have tended to be highly motivated and interested in practical results for their occupation or life-style. The majority fall in the age range of 25 to 40 (Paul, 1990). However, distance learners often have various motives and goals for studying at a distance. For example, Prommer (1990), in her research in Fern Universitat, found three major professional and work-related motives: higher professional qualifications (84.4%), opening up new professional perspectives (80.9%), and increasing specialist knowledge (78.6%).

Drop-out Candidates

The factors of sex, age and previous educational experience appear to be directly related to student drop-out. Men were more likely than women to drop-out

(Rekkedal, 1983; Woodley & Parlett, 1983). The opposite result was reported by Wihardit (1988) at the Universitas Terbuka: women were more likely to be non-registered students than were men. Due to the inconsistent findings of many studies, it is difficult to say whether or not either men or women drop-out more frequently in distance education systems.

Age is often related to students withdrawing from their program of studies. Two age group of students tended to drop-out more often than any other. Woodly and Parlett (1983) reported that among new students, those who were younger than 21 and older than 59 were more likely to drop-out. Those aged 30 to 39 were the most successful group. Lack of success in their studies of younger students was also reported by Wihardit (1988). The cohort of students who were less than 31 years old contained a higher proportion of non-registered students. Rekkedal (1982) reported that the minimum age for success was about 27.

According to Kennedy and Powell (1976), there are obvious differences between the needs and aspirations of older students and those of young people who enter university straight from secondary school. Peter Maris, cited by Kennedy and Powell (1976), concluded that young students on the whole do not set concrete goals which they

hope to achieve through selected studies. The fundamental difference between the age groups seemed to be that older students are more inclined to see a university education as a means of achieving personal objectives.

Different results in relation to age and student persistence were reported by Billingham and Travaglini (1980). In their study of the Individualized Degree Program at the University of Michigan, they reported that students who enter the program at relatively early ages (30 or younger) are more likely to be active and to make rapid progress toward graduation than older students. This difference may reflect cultural variations in the expected age for university graduation, with North American students being expected to complete studies at an earlier age.

Educational background also has a positive correlation with student persistence. Typically, lower previous educational qualifications lead to an increase in drop-out (Rekkedal, 1982; Woodley & Parlett, 1983).

Differences Between Successful and Unsuccessful Students

Apart from student characteristics, such as sex, age and educational background, there have been other basic differences between the successful student and the poor achiever. According to Maxwell (1979), successful students were convinced that college was important and,

despite hardships, found ways to study. They felt they studied harder than the average student did or "should". Poor achievers, on the other hand, allocated their studies time to friends, relaxing, watching television or fantasizing. They prepared only partially for exams and when studying, they were unsure of their priorities. Maxwell further explained that the low achiever tended to have family problems, was impulsively disparaging of self, was vulnerable to disparagement by others, tended to lack insight about self, lacked a clear set of personal goals and values, had frequent depression and was anxious.

Preventing Drop-out From Distance Education

Persons interested in controlling the level of attrition in distance education will certainly find plenty of ideas, but no panacea has yet been discovered (Scriven, 1991). Many measures have been undertaken to reduce student drop-out and to increase persistence; however, many distance education institutions have not experienced an increase in student enrollment. Lack of social life, lack of teacher assistance and a need for self-discipline are three major reasons why students have disliked studying by correspondence (Laube, 1992). From his study, Paul (1990) concluded that, to succeed in an independent study environment, a student needs to be very clear about his or her learning objectives; to have effective reading,

writing, study and time management skills; to have a strong sense of self; and to have the motivation requisite for overcoming the inevitable barriers to success such as competing priorities, lack of interaction with peers, and a less than ideal environment for study. The ultimate challenge has been not only to provide such services when students need them, but also to develop the individuals' capacity to look after their own learning needs. As institutions become committed to lifelong learning, open universities must do more than provide access and support. They must be passionate advocates of lifelong learning. They must do everything they can to help their students develop the attitudes and skills necessary to maximize opportunities to meet the goal of life-long learning.

The drop-out and persistence of students enrolled in correspondence study constitute the most frequently scrutinized phenomena. A range of institutional interventions has been suggested that can be profitably applied to optimize the satisfactory learning experiences of distance education students (Cookson, 1989).

The continuation of high attrition rates, despite revisions in course design and delivery, has led many researchers to identify 'personal' (as opposed to 'institutional') factors as essential to understanding why students have had difficulty in pursuing education at a

distance. This has focused on pre-admission services, which are intended to check the readiness of the students to learn via home study without reneging on the institution's commitment to open admissions (Paul, 1990). Rekkedal et al., (1983) proposed some efforts to increase completion rates from distance education such as reduction of turn-around time, follow-up on students, pre-produced tutor comments, and provision of personal tutor-counsellors. Turn-around time (the time from when the student submits the assignment until it comes back from the tutor) in distance education tends to be relatively long. The same problem, that the students waited too long for the examination results, was found to be a reason for dropping out (Wihardit, 1988; Amin, 1990). Rekkedal et al. (1983) found that students who received a personal encouraging letter upon enrolment began their studies earlier. They also reported that a course in study techniques, together with the follow-up letters during the initial phase of studies, may help to reduce the number of early withdrawals. Wihardit (1988) found a similar problem occurring with UT students. They were frustrated by the lack of response, on the part of the institution, to their complaint letters, and this frustration led them to drop-out.

Thompson (1990) found both that it is too easy to

fall behind in correspondence studies and that there is an expectation that greater motivation is required to succeed with correspondence study than with conventional classroom instruction. Distance learners must be internally motivated, or the system must motivate them externally (Murphy, 1991).

The NKI School in Norway, according to Rekkedal (1982), approached the challenge of increasing distance teaching quality and reducing drop-out rates from three different angles: professionalism of the staff through participation in external and internal courses, conferences and workshops; systematic and continuous development work aimed at the quality of all parts of the distance education system; and research work.

The roles of tutors and counselling services have helped to reduce student drop-out. According to Laube (1992), more marker/tutor contact, improvement of course material, counselling services, and the provision of opportunities to get to know other correspondence students are all perceived to be methods for reducing the number of drop-outs from correspondence study.

In order both to increase the success rate and to prevent student drop-out, distance education, according to Keegan (1986), must attempt to compensate for the following characteristics:

a) No heard language
b) Absence of non-language communication
c) Absence of a feed-back process student-to-teacher
d) Absence of a feed-back process teacher-to-student
e) Delayed reinforcement
f) Absence of student-to-student communication
g) Change in role of non-cognitive learning process (peer contact; anxiety; peer support and criticism) (pp. 121-122).

Summary

There have been numerous studies on drop-out in distance education conducted in the last twenty years. The following kinds of questions typically have been addressed: What kinds of variables are most responsible for student drop-out; what is the drop-out rate; and how important are demographic factors such as sex, age, and educational background? Due to various terms of drop-out and different approaches used in studying drop-out problems among distance education institutions, careful interpretation and consideration should be taken if the results of those studies are to be applied across distance education institutions.

The rate of drop-out across distance education institutions has differed according to how that rate was calculated. Some distance education institutions do not count non-starters as registered students, which results in higher completion rates than in cases when non-starters are counted as registered students. On the average, the drop-out rate in distance education has been found to be

between 30% to 50%.

Many factors have been reported as the reasons for dropping out. The most common reasons proposed by the students were job and family responsibilities, academic problems, and institutional commitments. It was very seldom that students gave personal problems, such as lack of motivation and discipline, as the main reasons for dropping out.

Demographic factors such as sex, age and educational background were often counted as important variables in student drop-out research. There was no clear pattern of drop-out between men and women. Some researchers found that men were more likely than women to drop-out, and some researchers found the opposite result. However, most researchers agree that older students perform better than younger ones, and students with higher previous educational background are more likely to succeed in their studies.

Many efforts have been made to reduce the drop-out rate and to increase persistence. The common approaches usually taken by the distance education institutions are improvement of student support services such as course design, delivery system, tutorial and counselling services; and attempts to understand personal factors as opposed to institutional factors. Since the distance

education system has different characteristics from the conventional education system, different efforts and approaches should be under taken to maintain the educational process. Thus, the next step would seem to be to begin to clarify the similarities and differences between drop-outs and persisters found in the Universitas Terbuka context.

CHAPTER 3: METHODS

Context of the Study

The setting for this study was the Universitas Terbuka (UT), headquartered in Jakarta, with the cooperation of 11 regional centers in the islands of Java and Bali. Universitas Terbuka was established in 1984 through Presidential decision to increase the capacity of higher education institutions and to provide high school graduates with equal opportunity for higher education. UT students are spread throughout the country and include many adults who live in remote areas. Most of UT students are teachers, civil servants, and private company employees who are already married and have family responsibilities.

UT facilitates the studies of its students with printed material as the main instructional medium, supported by audio cassettes (for certain courses), face-to-face tutorials, television and radio broadcast programs and study group cultivation.

Sample

Two groups of students were investigated in this study: persisters and drop-outs. A random sample was taken from the data records of students at Universitas Terbuka headquarters in Jakarta. Drop-outs included in the study were the students who withdrew in the last three

academic years, 1989/90 - 1991/92. In the other words, they did not register for any courses for four consecutive semesters starting with the first semester of academic year 1989/90, while persisters were the students who had persisted until the study began.

The sample was drawn from three faculties: Faculty of Mathematics and Natural Sciences, Faculty of Economics, and Faculty of Social and Political Sciences. The Faculty of Education was excluded. The three participating faculties have the same requirement for admission, high school graduation, whereas the Faculty of Education has different requirements. Further, the programs of the Faculty of Education are not provided for high school graduates but for improving the quality and degree level of teachers. There are 32 regional centers through-out the country; however, only 11 regional centers in Java and Bali were included in this study.

According to Statistic Universitas Terbuka 1991, the total number of UT students (excluding students from the Faculty of Education) through the end of 1991 was 92 765. This total consisted of 36 277 active students and 56 488 passive students (not registered for more than four consecutive semesters). In the three faculties studied, there were 51 670 students located in Java and Bali. This represented 55.7% of all registered students in three

faculties at UT, and consisted of 23 062 active students (63.6% of all active students), and 38 608 passive students (68.3% of all passive students).

The desired number of subjects for the study was 150 to 200 for each group. Earlier studies reported that the return rate of questionnaires from drop-outs in distance education was usually much lower than that from persisters. To get the desired number of subjects, 400 persisters and 800 drop-outs were randomly selected to receive survey materials.

Questionnaires with stamped return envelopes were sent on May 25, 1992. A deadline of June 15, 1992 was set for the return of the questionnaire. The final date for response from the subjects was June 30, 1992.

Variables

The variables of the study were mainly developed from the models suggested by Kember (1989) that was based on Tinto's model (1975), and from other previous studies which applied Tinto's model, Bernard and Amundsen (1989) and Sweet (1986). A description of the variables is as follows:

Variables set	Description
I. Individual characteristics	1. Sex 2. Age 3. Marital status 4. Employment status

	5. Number of working hours
	6. Previous educational background
	7. Time spent for studying
	8. Reason for taking the program
	9. Goal expectation
II. Academic environment and integration	10. Satisfaction with effectiveness of materials
	11. Satisfaction with test items
	12. Satisfaction with student support services
	13. Satisfaction with learning achievement
III. Social integration	14. Level of attending tutorials
	15. Level of contact with regional center
	16. Level of social contact with peers
IV. Goal and institutional commitment	17. Goal satisfaction
	18. Self motivation
	19. Institutional commitment
	20. Assignment completion
	21. Examination preparation

Procedures for Data Collection

Instrumentation

In order to collect information from the subjects, a questionnaire was developed (see Appendix B). Some items of the questionnaire were adapted from those in the study by Pascarella and Terenzini (1980). The format of the questionnaire consisted of three parts: 1) Individual

characteristics and background; 2) Closed-ended responses measuring student personal satisfaction and satisfaction toward institutional services; and 3) Open-ended response consisting of student's comments, complaints and suggestions.

The first part consisted of nine multiple choice questions and completion items. The second part included a six-point, twenty six item, Likert-type scale measuring the extent to which subjects experienced and were satisfied with the academic environment and integration, social integration, and goal and institutional commitment. The third part of the questionnaire was open-ended. In this part, respondents were asked to suggest or comment on their perceptions in relation to their studies at the Universitas Terbuka.

Pilot Test

The original questionnaire was developed in English and then translated into Indonesian. There were at least four steps taken when constructing the questionnaire before sending it to respondents. The first step was an evaluation by a group of UT staff members who were studying at the University of Victoria. These staff members come from different job units at UT, and they have all been working at UT for several years. The purpose of this evaluation was to get input in relation to the

content and to ensure that translation of every item of the instrument fit and made sense. Useful input was gained for the improvement of the questionnaire.

To establish the validity of the instrument, discussions were carried out with the appropriate experts such as the Rector (Dr. Setijadi), the Vice Rector Operational Affairs (Dr. Atwi Suparman), and the Head of the Research Center of Universitas Terbuka (Dr. Aria Djalil). Consultation with these UT leaders was important to ensure that questionnaire items would fit with the conditions at UT under which the study was conducted. Some corrections were made based on the results of this consultation.

The next step was a pre-test of the instrument on UT students. The pre-test consisted of two steps. In the first pre-test, ten students who followed an intensive tutorial at UT headquarters were asked to complete the questionnaire. Interviews were then conducted with these students after they completed the questionnaire. The purpose of this pre-test was to ensure that the students understood every single item and that their understanding was the same as that of the author. Revisions were made based on the results of this pre-test.

The second pre-test was conducted at the same place but with different students. Twenty different students

were asked to participate in this pre-test. The purpose this time was to test the reliability of the instrument. Cronbach's alpha reliability coefficient was used to determine the reliability of the instrument, and the results were estimated to be .73. Minor revisions were made, especially concerning the improvement of the language of certain items. The results of this test showed that the instrument could be regarded as sufficiently reliable and ready for distribution to the respondents. The final form of the questionnaire is found in Appendix B and C.

A reliability test was also conducted after the instrument was completed by the respondents. The result of this reliability test was .77. This result was consistent, and in fact even higher than those of the pre-test.

Data Analysis

Data were analyzed by variable cluster and comparisons between persisters and drop-out were made within each cluster. The main statistical procedures used in this study were Factor Analysis, Chi-square test, T-test, and Descriptive Analysis (frequency distribution and mean). Factor Analysis was used both to obtain the correlation among variables and to reduce a large number of variables into factors. It was expected that items

created to measure certain variables would load in the same factor. The Chi-square test was used to analyze categorical data such as individual characteristics and student background (sex, age, marital status, occupation, reason for studying, and study goal). The t-test was applied to analyze possible differences between persisters and drop-outs on such factors as educational background, hours of work, time spent for studying, student personal satisfaction and student satisfaction toward institutional support services.

Open-ended responses were grouped by the author into three categories: institutional problems (course materials, examinations, tutorials, registration, tuition, and communication between UT and students), personal problems (job and family responsibilities, financial constraints, academic failure and self directed study), and general statements. The frequency and type of responses were reported. Descriptive analysis was used to analyze these findings.

CHAPTER 4: RESULTS AND DISCUSSION

Response Rate

The original number of subjects sent the survey materials was 1200 (400 persisters and 800 drop-outs). However, only 1112 packages of survey material reached respondents' addresses. As many as 88 sets of survey materials did not arrive at the subjects' addresses due to changes of address. Thus, the actual number of subjects was 1112 (365 persisters and 747 drop-outs), and it was assumed that all those subjects received survey materials. Out of the 1112 respondents, 482 respondents (43.3%) completed and returned the questionnaires, including 195 persisters (53.42%) and 287 drop-outs (38.42%). Two questionnaires were eliminated due to incomplete responses.

Table 1
Sample Distribution and Response Rates

Subject	Number in sample	Number of respndnts	Respns rate	Respns w/ comment	Respns rate
Persisters	365	195	53.42%	103	28.21%
Drop-outs	747	287	38.42%	148	19.79%
Total	1112	482	43.35%	251	22.57%

Among those who returned the questionnaire, 251 respondents (22.57%) completed the open-ended response column, 103 persisters (28.21%) and 148 drop-outs (19.79%). Their comments included complaints, suggestions, and questions, especially in the area of examinations, course materials, registration and communication between UT and its students.

Data collected from the questionnaires were analyzed by using frequency distributions, chi-square tests and t-tests. Results and discussion of the findings and data analysis are presented below.

Individual Characteristics

Sex

The majority of respondents were male (85.3%), and only 14.7% were female (see Table 2). A Chi-square test showed that there was no significant difference between males and females in their registration status (Chi-square=0.51, df=3, p>.05).

Table 2
Respondents' Registration Status By Gender

	Persister		Drop-out		Total	
Gender	n	%	n	%	n	%
Male	169	41.1	242	58.9	411	85.3
Female	26	36.6	45	63.4	71	14.7
Total	195		287		482	100.0

Note: Chi-square=0.51, df=1, p>.05.

There was no evidence to conclude that females drop-out more often than males or vice versa. Knox, in Verduin and Clark (1991), argued that any adult can learn any subject if given enough time and attention. However, a different result was reported by Wihardit (1988), that females were more likely to be non-registered than males at Universitas Terbuka. Different study time and different subject criteria may result in different findings.

Age

The age of respondents was categorized into six groups: 1) 25 years or less; 2) 26-30 years; 3) 31-35 years; 4) 36-40 years; 5) 41-45 years; and 6) 46 years and over (see Table 3). There were no respondents in the study who were less than 26 years old. For both persisters and drop-outs, the mode of the age between 36-40 years (27.2% and 24.0% respectively). However, t-test analysis showed that there was a significantly different between persisters and drop-outs in age group category (means score of 3.99 and 3.73 respectively, $t=2.14$, $p<.05$). Persisters tended to be older than drop-outs. The trend that younger students more likely to be drop-out at UT was supported by Wihardit (1988). Older students are more likely motivated to finish their studies due to age pressures and UT is the best alternative for them.

Table 3
Distribution of Respondents by Age

Category	Age (years)	Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
1	<26	0	0.0	0	0.0	0	0.0
2	26-30	33	16.9	67	23.3	100	20.7
3	31-35	38	19.5	64	22.3	102	21.2
4	36-40	53	27.2	69	24.0	122	25.3
5	41-45	40	20.5	54	18.8	94	19.5
6	>45	31	15.9	53	11.5	84	13.3
Total		195	100.0	287	100.0	482	100.0

Note: t=2.14, df=480, p<.05.

Marital Status

The majority of the respondents were married people with children (75.3%). Data analysis using a cross-tabulation chi-square test showed that there was no significant relationship between marital status and registration status (chi-square=3.41, df=3, p>.05). Family responsibility, thus, is not always a constraint on students finishing their studies.

Theoretically, married students have less time to be devoted to their studies; however, they did not show less persistence than unmarried students. Married students may have felt more assured about their study goals and more confident with their decisions to study at UT. Even though family businesses often compete with their study time, students might be motivated by their family members to complete their studies. Some students may take

university courses with the expectation that, after finishing, they can increase their income or find a better job and, thus, improve the family economy. Some students might keep studying to provide an example for their children. Family responsibilities usually become a problem if, due to financial limitations, the student gives more priority to family needs than to studies. This factor is often given by students as a reason for dropping out and will be discussed in more detail in the chapter on the students' comments.

Table 4
Distribution of Respondents by Marital Status

Marital status	Persister		Drop-out		Total	
	n	%	n	%	n	%
Unmarried	32	16.4	58	20.2	80	18.7
Married without children	10	5.1	16	5.6	26	5.4
Married with children	153	78.5	210	73.2	363	75.3
Others with children	0	0.0	3	1.0	3	0.6
Total	195	100%	287	100%	482	100%

Note: Chi-square=3.41, df=3, p>.05.

Employment Status and Working Hours

The employment status of the respondents was categorized into 6 major employment groups in Indonesia (civil servant, army, government-owned company employee, private company employee, entrepreneur, and unemployed).

More than 94% of respondents were working people. As shown in Table 5, the largest proportion of respondents were civil servants (39.4%), followed by private company employees (27.8%), government-owned company employees (18.7%), entrepreneurs (6.8%), unemployed (5.4%), and army (1.9%).

Table 5
Registration Status By Employment Status

Employment Status	Persister		Drop-out		Total	
	n	%	n	%	n	%
Civil servant	62	32.6	128	67.4	190	39.4
Army	4	44.4	5	55.6	9	1.9
Gvmnt. comp. employee	53	58.9	37	41.1	90	18.7
Prvt. comp. employee	52	38.8	82	61.2	134	27.8
Entrepreneur	12	36.4	21	63.6	33	6.8
Unemployed	12	46.2	14	53.8	26	5.6
Total	195		287		482	100.0

Note: Chi-square=18.31, df=11, p<.01.

The large number of civil servant respondents in this study is not surprising since civil servants in Indonesia, in general, have more spare time than other employees. They work on average six hours a day, compared to private employees who work 8-9 hours a day. The most important factor that motivates civil servants is that they will

obtain promotion more easily if they obtain a new degree from the university. For the private employee or army personnel, promotion is not as easily obtained as for civil servants, since their employers stress professionalism and job performance more than a new degree.

A chi-square test of the relationship between registration status and occupation was significant (chi-square=18.31, df=11, p<.01). From the data, it is evident that civil servant have a higher proportion of drop-outs (67.4%), followed by entrepreneurs (63.6%), private company employees (61.2%), army (56.5%), unemployed (53.8%), and government owned company employees (41.1%).

The expectations of the students taking the program may have been the principal reason either to persist or to drop-out. Civil servants expect to get promoted after getting a degree. Whenever they find it hard to complete all the courses, the expectation of obtaining a degree becomes less definite. Ultimately, they leave the program.

Table 6
Distribution of Respondents by Working Hours Per Week

Category	Working hours/week	Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
1	20 or less	2	1.0	1	0.3	3	0.7
2	21 - 30	1	0.5	9	3.1	10	2.2
3	31 - 40	55	28.2	101	35.2	156	34.2
4	41 - 50	87	44.6	106	36.9	193	42.3
5	51 - 60	30	15.4	39	13.6	69	15.1
6	61 or more	8	4.1	17	5.9	25	5.5
	Missing	12	6.2	14	4.9	26	0.0
Total		195	100%	287	100%	487	100%

Note: t=0.99, df=454, p>.05
Missing data on 26 persons are for unemployed respondents.

Meanwhile, other students, such as private company employees or government owned company employees, place more emphasis on their goal of improving their knowledge and professionalism. Having a new degree does not necessarily mean getting a promotion. The employers emphasize skill and professionalism in promotion criteria--not merely degree completion. Strict requirements for promotion motivated these students to improve their skills and abilities in handling their jobs by taking university courses. They have to get something specific from the courses in order to improve their status. Thus, they would read and study course materials more thoroughly and seriously. These findings were similar to the results of the study reported by Wihardit (1988).

Table 7
Employment Status By Number of Working Hours

EMPLOYMENT STATUS	WORKING HOURS PER WEEK <21 n	%	21-30 n	%	31-40 n	%	41-50 n	%	51-60 n	%	>60 n	%	Total	
CIVIL SERVANT	1	0.5	8	4.2	75	39.5	75	39.5	23	12.1	8	4.2	190	41.7%
ARMY	0	0.0	0	0.0	3	33.3	3	33.3	2	22.2	1	11.1	9	2.0%
GOV. COMP. EMPLOYEE	1	1.1	0	0.0	27	30.0	41	45.6	17	18.9	4	4.4	90	19.7%
PRIV. COMP. EMPLOYEE	1	0.7	1	0.7	47	35.1	54	40.3	24	17.9	7	5.2	134	29.4%
ENTRE-PRENEUR	0	0.0	1	3.0	4	12.1	20	60.6	3	9.1	5	15.2	33	7.2%
Total	3		10		156		193		69		25		456	
	0.7%		2.2%		34.2%		42.3%		15.1%		5.5%		100%	

Note: Chi-Square=28.61, df=20, p>.05.

Something interesting from this finding is that, even though government owned company or private company employees in Indonesia usually have longer working hours than civil servants, they tended to be more persistent in their studies at UT.

Holding a 31-50 hour a week job was not a constraint when taking university courses. This is shown in the results of the study where there was no significant relationship between persistence and number of working hours ($t=0.99$, $df=454$, $p>.05$). Persisters, as well as drop-outs, reported a similar average of working hours a week, between 31 to 50 hours. Lack of time for studying

due to job responsibilities may not be a strong reason for dropping-out.

Even though the test result was not significant (chi-square=0.99, p>.05), persisters reported working a higher number of mean hours than drop-outs (mean=3.91 and 3.82 respectively). Other reasons, such as goal commitment or self-motivation, are more influential in determining successful completion of university courses.

Educational Background

There was a significant relationship between the students' level of educational background before taking the program and their persistence at UT (t=2.54, p<.05). Persisters tended to have higher levels of educational background than did drop-out students (mean 2.16 and 1.90 respectively). The results of a cross-tabulation test showed that the percentage of persisters tended to be lower in lower level of educational background such as high school (34.7% compared to 65.3%), some years in university (44.4% compared to 55.6%) and Diploma (16.0% compared to 84.0%). A higher proportion of persisters was found in higher levels of education such in Bachelor Degree (53.3% compared to 46.7%).

Table 8
Registration Status By Educational Background

Educ. Background		Registration Status: Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
1	High schl.	74	34.7	139	65.3	213	44.2
2	Univ. D.O.	67	44.4	84	55.6	151	31.3
3	Diploma	4	16.0	21	84.0	25	5.2
4	Bachelor	48	53.3	42	46.7	90	18.7
5	Master/Dr.	2	66.7	1	33.3	3	0.6
Total		195		287		482	100.0

Note: t=2.54, df=480, p<.01. Chi-square=19.87, df=5, p<.01.

Students' former experience in higher educational levels was likely to have a positive influence on their studies. Even though they already have a first degree, this does not hamper their motivation to complete their studies at UT. This finding is similar to results reported by Rekkedal (1982) and Woodley and Parlett (1983). The lower students' previous educational qualifications the more likely they are to drop-out. Verduin and Clark (1991) stated that adults with more recent education experiences tend to do better than those who have not had those experiences. According to Holmberg (1989) older, mature and better-qualified enrollees are most likely to have the strong motivation necessary to succeed at distance education.

Studying by correspondence, besides demanding a high

motivation, also requires the ability to work alone and to set one's own pace without depending too much on instructors. Students with higher level educational backgrounds are more likely to have experience in setting their own pace and managing the time needed for completing the course successfully.

Time Spent for Studying

One surprising result was found in the time spent for studying. The drop-outs reported spending a slightly higher mean amount of time for studying than persisters (2.21 compared to 2.07), between 6-15 hours a week. However, the results of the two-tailed t-test showed that there was no significant difference between persisters and drop-outs in allocation of time for their studies ($t=1.38$, $p>.05$). Similar results were reported by Suciati (1990). She found that study hours did not relate to the achievement of UT students.

Providing the same amount of time for studying does not necessarily gain the same result. Hezel & Dirr (1991) suggested that distance learners must assess not only how much time they will need to devote to their academic work, but also what periods of time they have available for study purposes during each day of the week. Students' learning speed and how effectively and intensely they use their time will have a great influence on the final

results. It is suggested that persisters might have better pacing skills and utilize their time more effectively and intensely than drop-outs.

The reasons and goals for taking the courses may also relate to their concerns related to studying. Persisters may set goals and reasons more clearly, and thus, they give more serious attention to their studies and are more motivated than drop-outs.

Table 9
Distribution of Respondents on Time Spent for Studying Per Week

Category	Study hours/week	Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
1	5 or less	72	36.9	89	31.0	161	33.4
2	6 - 10	65	33.3	107	37.5	172	35.7
3	11 - 15	37	19.0	55	19.2	82	19.1
4	16 - 20	16	8.2	18	6.3	32	7.1
5	21 - 25	4	2.1	13	4.5	17	3.5
6	26 or more	1	0.5	5	1.7	6	1.2
Total		195	100%	287	100%	482	100.0

Note: $t=-1.38$, $df=480$, $p>.05$.

Even though study hours were not related to the respondents' registration status (mean score of 2.07 and 2.21 for persisters and drop-outs respectively), on average, students study between 6-10 hours a week. As shown in Table 9, more than 69% of respondents spent less than 10 hours per week. An average student takes 14 credit hour courses per semester (see Table 13). This

amount of time (6-10 hours) may not be sufficient to study all course materials completely. Theoretically, a student should study at least 14 effective hours per week. Similar findings reported by Suciati (1990) showed that more than 50% of UT students spent fewer hours than were recommended.

Distance learners differ from conventional students. They must be more self-motivated and self-directed in their studies since they lack help from teachers or tutors. What amount of time they provide for their program and how they spend their time during the week will have a great affect on their achievement in the distance learning program.

Reasons for Taking the Program

There were no significant differences between persisters and drop-outs as to the reason given for taking the program. The most common reason given by respondents for taking the program was the flexibility of time for studying. As shown in Table 10, 80.3% of respondents reported that their main reason for studying at UT was that they could study while working. This is not surprising since the majority of UT students are working people. They can study while holding their jobs.

Table 10
Distribution of Respondents on Reasons for Taking the Program at UT

No.	Reason	Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
1.	Fail to enter other univ.	8	4.1	14	4.9	22	4.6
2.	Can study while working	151	77.4	236	82.2	387	80.3
3.	Cost is cheap	16	8.2	20	7.0	36	7.5
4.	Others	20	10.3	17	5.9	37	7.7
Total		195		287		482	100.0

Note: Chi-square=3.56, df=3, p>.05

Goal of Studying

There was no significant difference between persisters and drop-outs in their study goals while at UT. Three main goals were stated by the respondents: to seek knowledge, to satisfy the requirement of their employers, and to improve their present position or find a new position. Almost half of the respondents stated that their goal in taking UT courses was to learn (44.8%). This percentage exceeded the other two main goals 'required by the employer' (27.4%) and 'improve present job or find new job' (21.6%).

Professional and job related goals were usually reported by former researchers as major goals for taking university courses. Prommer (1990) found three major professional and job-related goals: higher profession

Table 11
Distribution of Respondents on Study Goal

No.	Study goal	Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
1.	Make friends	1	0.5	2	0.7	3	0.6
2.	Escape from boredom	4	2.1	3	1.0	7	1.5
3.	Improve or get new job	40	20.5	64	22.3	104	21.6
4.	Required by the employer	64	32.8	68	23.7	132	27.4
5.	To seek learn	78	40.0	138	48.1	216	44.8
6.	Others	8	4.1	12	4.2	20	4.1
Total		195		287		482	

Note: Chi-square=6.27, d.f.=5, p>.05

qualifications (84.4%), opening up new perspectives (80.9%), and increasing special knowledge (78.6%). This finding arouses the suspicion that cultural influences may have led the respondents not to state their true goals. For most respondents, to seek knowledge may be the most polite reason to give. In Indonesian society, the price of a university degree and professionalism is still high. Getting a university degree and having specialist knowledge will open up new perspectives and widen opportunities for job improvement. A report of student interviews conducted by Suciati (1990) may reflect the importance of a university degree. She concluded that students hope for a better future and this depended on graduating from Universitas Terbuka. The chance for job

promotion or of finding a job would, thus, be better with an UT degree.

Findings and Discussion of Closed-Ended Statements

Academic Environment and Integration

The quality of the academic environment at Universitas Terbuka was measured by students' satisfaction with the effectiveness of course materials, with examinations, and with other student support services. Academic integration was measured by students' academic performance and their level of intellectual development. Fourteen items were developed to measure student perception toward an academic environment and integration. The results of a factor analysis of academic environment and integration, social integration, and goal and institutional commitment are summarized in Appendix A. Three factors assigned for those three variables accounted for 59.0% of the variance with eigenvalues ranging from 9.65 to 3.09. With a cut of .35 for inclusion of an item in interpretation of a factor, the majority of items designed to measure the academic environment and integration loaded on a single factor. All items were loaded in the same factor except item number 11 (perception of students toward modules distribution services). This item tended to load into other factors; however, this item was still included in the discussion.

Table 12
Mean Score of Academic Environment and Integration, Social Integration and Goal Commitment for Persisters and Drop-outs

	Persister		Drop-out		
	Mean	SD	Mean	SD	t
Academic environment and integration					
Satisfaction with course materials	4.44	0.73	4.46	0.77	-1.38
Satisfaction with test items	3.51	1.09	3.65	1.10	-1.38
Satisfaction with std. support services	4.63	0.67	4.56	0.63	1.30
Self perception of learning achievement	4.71	0.58	4.84	0.51	-0.51
Social integration					
Level of attending tutorial	1.32	0.75	1.73	0.88	-5.28**
Level of contact with regional center	2.04	1.05	1.55	0.73	6.04**
Level of social contact with peers	1.15	0.57	1.10	0.38	1.30
Goal commitment					
Goal satisfaction and motivation	5.13	0.59	4.80	0.79	4.92**
Institutional commitment	5.14	0.74	4.76	0.86	4.98**
Assignment completion	4.60	1.18	4.79	1.02	-2.06*
Examination preparation	4.81	0.72	4.50	0.79	4.26**

Note: *p<.05. **p<.01

Satisfaction With the Effectiveness of Course Materials

In terms of the effectiveness of course materials, there was no significant difference in perception between persisters and drop-outs. With mean scores ranging between 4.26 to 4.62 (see Appendix A), both groups of respondents were sufficiently satisfied with the content, the language, as well as the design of printed course materials.

Printed course materials are the main mode of instruction at UT, thus, students satisfaction with those materials is very important. The success of study at UT is determined mainly by the success in mastering those course materials, since other support media such as tutorial, audio/video cassette, radio and television broadcast, and tele-conferences are not now widely accessible.

Satisfaction With Test Items

Satisfaction with test items was measured by student perception toward the difficulty of test items. There was no significant difference in perception between persisters and drop-outs (mean score=3.51 and 3.64 respectively, t=-1.38, p>.05), and both groups of respondents felt that the difficulty level of test items was moderate. Likely, difficulty of the examination was not related to students'

decision to leave the program. Thus, it may be that failure in examinations might not be related to test item difficulties but more to students' lack of preparation, included might be things such as less time devoted to the program than recommended or a lack of previous educational experiences, as discussed earlier.

Satisfaction With Student Support Services

Academic and administrative support system services were mainly measured by the UT's delivery system, registration services, examination administration, and tutorial. As shown in Table 12, generally, there was no significant difference in the perception of student support services between persisters and drop-outs. With means of 4.63 and 4.56 for persisters and drop-outs respectively, it can be concluded that both groups of respondents were sufficiently satisfied with the academic and administrative support services provided by UT. Student support services are no longer seen as important factors of drop-out since student services provided by UT are improving. A similar study by Wihardit (1988) reported that student discouragement with the institutional services, especially in the areas of registration administration, course material distribution, and uncertain examination schedules resulted in fewer registrations in the following semester. The improvement

of UT's operational system in 1987/1988, accomplished by involving the regional centers more in handling registration and course material distribution and by improving examination management, would likely improve student fulfillment and result in fewer complaints to UT.

Even though, in general, student support services were sufficient, certain aspects of services were less fulfilling and differed significantly between persisters and drop-outs. Those services were the availability of registration/examination forms, the delivery of course materials, the announcement of exam results, and the tutorial system (see Appendix A). With mean scores of 5.15 and 4.94 for persisters and drop-outs respectively, it can be concluded that both groups of respondents were satisfied with the availability of course and supplemental exam registration forms. However, drop-outs were significantly less satisfied than persisters ($t=0.42$, $p<.05$).

Another service that requires attention is the distribution of printed course materials (modules). With mean scores of 4.92 for persisters and 4.42 for drop-outs, both groups of respondents felt sufficiently satisfied with the availability of modules. Nevertheless, significant differences were found between persisters and drop-outs ($t=5.13$, $p<.01$), arousing the suspicious that

difficulties in obtaining printed course materials may result in students not continuing their studies.

Since the implementation of a new academic and administration system in 1986, the purchase of course materials is not compulsory. The modules can be bought at every regional center or bookstore appointed by UT or can be ordered through a post office to UT Headquarters. The modules needed by students are not always available at regional centers or bookstores due to their being out of stock. When this situation occurs, students must order directly from the UT Headquarters through the post office, or they must wait until the needed materials become available. Consequently, students lose some study time. If this problem occurs frequently, students may become discouraged and might drop their studies.

The third crucial problem in student support services currently is the announcement and delivery of examination results. Interestingly, persisters felt significantly less satisfied than drop-outs with this issue (mean scores of 3.98 and 4.26 respectively, $t=2.63$, $p<.01$). Students' dissatisfaction with examination results delivery has existed since the new system was implemented in 1986. Wihardit (1988) reported that students complained that UT announced examination results too late to permit registration for the next semester. Theoretically, UT

announces examination results six weeks following examinations (Katalog Universitas Terbuka, 1991); however, that deadline is often extended.

The moderate scores given by drop-out students to this issue may reflect that this problem may no longer be relevant to them, they are more concerned with issues that relate directly to their withdrawal. On the other hand, persisters always wait anxiously for the examination results, because the results of the last semester will be considered for the total number of courses to be taken in the upcoming semester. Frequent delay of the exam results announcements could decrease students' motivation to register for courses and decrease the credibility of the institution in the mind of the students.

The last important issue in student support services was tutorials. As shown in Appendix A, persisters felt significantly less satisfied with the current tutorial system than drop-outs (mean scores of 3.90 and 4.17 respectively, $t=-2.63$, $p<.01$). Not only was student satisfaction with tutorials relatively low but their attendance level was as well (see Table 14). Thus, tutorials conducted by UT currently do not satisfy or attract sufficient numbers of students.

The tutorial system at UT has changed several times in accordance with the changes in the operational system

and students' demands. During the old system (package system) UT regularly conducted tutorials at regional centers twice every semester for all courses offered. This tutorial system was possible since the number of courses offered was still limited. This was no longer the case after UT changed the operational system in 1986; the number of courses doubled and students were free to register for the courses they wanted. UT could not afford to maintain the old tutorial system. The problems were difficulties in providing qualified tutors for all courses, limited numbers of students attending tutorials in many courses and financial constraints.

Tutorials were then based on student demand. Tutorials would be conducted only if a certain number of students asked for them. A limited number of meeting hours, a lack of qualified tutors, and a lack of student preparation all meant that many tutorials did not run smoothly. In the academic year of 1989/1990, UT began to conduct more intensive tutorials to help students who really needed tutorials and to provide more qualified tutors. Students who wanted this tutorial had to pay an extra charge. This additional cost might have been the main reason that tutorials did not attract many students.

Self Perception of Learning Achievement

Self perception of learning achievement was assessed by measuring the satisfaction the students showed with their tutorial effects on their academic performance, the influence of social activities and contact with regional center on their motivation for studying; as well, the general feeling of fulfillment with the extent of their intellectual achievement since enrolling at UT.

As shown in Table 12, in general, there were no significantly different perceptions of learning achievement between persisters and drop-outs. With average mean scores of 4.71 for persisters and 4.84 for drop-outs, both groups of respondents were satisfied with their academic achievement. One thing that significantly differentiated persisters from drop-outs was their satisfaction with the extent of their intellectual development since enrolling at UT ($t=2.36$, $p<.05$, see Appendix A). This perception might be related to students' performance in courses. On the average,

Table 13
Average Credit Taken and Pass Per Semester

	Persisters		Drop-outs		
	Mean	S.d	Mean	S.d	t
Credit Taken	14.14	1.48	13.58	1.42	4.17**
Credit Pass	12.01	1.62	11.02	2.16	5.50**

Note: *p<.05. **p<.01

persisters' credit-passes were significantly higher than those of drop-outs (see Table 13). Likely, students achievement in credit courses might relate to the decision to drop-out.

Social Integration

Students' levels of tutorial attendance, contact with a regional center, and social contact with peers were used as measures of social integration. Four items were created for this purpose. With a cut of .35 for including an item in interpretation of a factor, the result of Factor Analysis showed that all items loaded on one factor (see Appendix A), the same factor as the academic environment and integration variable. The small number of items created for the social integration variable may have resulted in those items not loading on a separate factor.

The level of social integration of respondents was very low. As shown in Table 14, more than 61% of respondents never attended an intensive tutorial at a regional center nor at a study group; 47% never made contact with a regional center, and more than 91% never participated in social activities at the regional center. As can been seen in Table 12, persisters' levels of tutorials attendance were significantly lower than those of drop-outs (means=1.32 and 1.73 respectively, $t=-5.28$, $p<.01$).

Table 14
Frequencies of Respondents in Attending Social Activities

Activities	Persister n	Persister %	Drop-out n	Drop-out %	Total n	Total %
Intensive Tutorial at Regional Center						
Never	151	77.4	145	50.5	296	61.4
4 times or less	32	16.4	104	36.2	133	28.2
5-8 times	6	3.1	24	8.4	30	6.2
9-12 times	2	1.0	7	2.4	9	1.9
13 times or more	4	2.1	1	0.3	5	2.1
Tutorial at study group						
Never	164	84.1	166	57.8	330	68.5
4 times or less	18	9.2	72	25.1	90	18.7
5-8 times	3	1.5	21	7.3	24	5.0
9-12 times	4	2.1	9	3.1	13	2.7
13 times or more	6	3.1	19	6.6	25	5.2
Contact with Regional Center						
Never	69	35.4	161	56.1	230	47.7
3 times or less	76	39.0	99	34.5	175	36.3
4-6 times	28	14.4	22	7.7	50	10.4
7 times or more	22	11.2	5	1.7	27	4.6
Social activities						
Never	178	91.3	265	92.3	443	91.9
3 times or less	10	5.1	18	6.3	28	5.8
4-6 times	1	0.5	2	0.7	3	0.6
7 times or more	6	3.1	2	0.7	8	1.7

Note: N=482, n Persister=195, n Drop-out=287.

However, persisters showed higher levels of contact with a regional center than those of drop-outs (mean 2.04 and 1.55 respectively, $t=6.04$, $p<.01$). There was no significant difference between groups of respondents in participating in social activities (mean=1.15 and 1.10, $t=1.30$, $p>.05$).

The use of levels of attending tutorials as a measure of social integration is in line with Sweet's (1986) suggestion. Face-to-face tutorial is one way for students to meet with peers and tutors. Besides their academic influence, tutorials are important to social integration, since the opportunity to meet friends does not occur as often for distance education students as it does for conventional students.

Interestingly, drop-out students tended to attend tutorials more often than persisters. The majority of students who participated in tutorials attended four or fewer times a year. This low frequency of attendance may have lessened the effect of tutorials on their academic achievement.

Low participation of students in social activities may be due to the fact that the majority of students are working people and they do not have enough time to take part in such activities. Another reason for such low participation may be that the number or type of activities provided by the institution was insufficient.

Contact with staff at a regional center has a positive association with the academic achievement of respondents. Persisters tended to make more frequent contact. The regional center is the place for students to come if they want to solve their problems, especially those related to

administrative affairs. The opportunity to meet with regional center staff can also be used as a medium for academic problems consultation, an opportunity for personal links, socialization, counselling, and a stimulus for encouraging independent study.

Goals and Institutional Commitment

Goals and institutional commitment were measured by goal satisfaction and motivation, institutional commitment, assignment completion, and examination preparation. Nine items were developed to measure this variable. The factor analysis results were that, with a cut of .35 for inclusion of an item in interpretation of a factor, all items loaded on a single factor with loading of between .46 and .84 (see appendix A). As shown in Table 12, the mean scores of persisters in all variables assigned to measure goal and institutional commitment (except assignment completion) were significantly higher than those of drop-outs. In assignment completion, drop-outs had a higher mean than persisters.

Goal Satisfaction and Motivation

To measure goal satisfaction and motivation, respondents were asked about their satisfaction with their decision, whether they have made the right decision by choosing to study at UT, the importance of graduating from university, and their level of expectation of getting a

new job or of improving a present job after completing the program. As shown in Table 12, persisters had a higher level of goal satisfaction and motivation than drop-outs (t=4.92, p<.01).

Both groups of respondents (persisters and drop-outs) agreed that they had made the right decision by choosing to study at UT (mean=5.19 and 4.91 respectively). However, persisters were significantly more confident in their decision than drop-outs (t=3.56, p<.01; see Appendix A). With means of 5.44 and 5.14 respectively for persisters and drop-outs, both groups of respondents felt that graduating from the university (UT) was very important. In this item, persisters also showed a significantly higher score than drop-outs (t=5.26, p<.01). The appreciation of a university degree was also an important motivation for students to complete their studies. Both groups of respondents were sufficiently confident that they would improve their jobs or get new jobs if they graduated from UT, but persisters still showed a higher level of self-confidence than drop-outs (mean=4.75 and 4.52 respectively, t=3.59, p<.01).

Satisfaction with the study-goals is important in the maintenance of program continuation. Before entering UT, students may have a set of goals. If they find that study at UT is consistent with their goals, they will be more

motivated to complete their programs. For instance, students who expect that a new degree will be a requirement for getting a promotion or will be necessary for job improvements, are more likely to complete their programs. According to Tinto (1975), the lower the individuals' commitment to the goal of college completion, the more likely they are to drop-out from the college. Goal commitment is the most important variable that is associated with student success or drop-out. Tinto further explained that, presumably, either low goal commitment or low institutional commitment can lead to drop-out. Sufficiently high commitment to the goal of college completion, even with a minimal level of academic and/or social integration and, therefore, minimal institutional commitment, might not lead to drop-out from the institution.

Institutional Commitment

Institutional commitment was measured by the eagerness of respondents to continue the program and their intention to promote the university in the workplace or community. Even though drop-outs had already stopped-out for more than two years, they still showed a sufficiently strong eagerness to register for the next registration. However, as shown in Appendix A, persisters showed a significantly higher desire to persist than drop-outs

(mean=5.07 compared to 4.54, t=4.95, p<.01). Positive institutional commitment was shown by both groups of respondents by their intention to encourage colleagues to attend UT; nevertheless, persisters showed significantly higher intentions than did drop-outs (mean=5.21 and 5.08 respectively, t=2.89, p<.01). Suciati (1990) found that students who intended to register for the following semester were likely to have a higher score on this item.

Universitas Terbuka with its distance educational system is relatively new in Indonesia. Indonesian people have not yet been sufficiently acquainted with the UT programs. Some students who registered at UT did not completely understand UT program with its distance educational system. A lack of understanding and preparation in this group of students caused them difficulty in their studies and led to a tendency not to complete the program. To promote and attract more students to register at UT, students' satisfaction with UT is important. The students who feel satisfied with their expectations tend to have higher commitment to the institution and tend to have higher intention to promote the UT program to their colleagues.

Assignment Completion

Assignment completion was measured by students' efforts to complete home assignments provided by the

institution. In this case, drop-outs showed a significant higher score than persisters (mean 4.71 and 4.58 respectively, t=-2.06, p<.05). For most of the courses, UT only set one assignment for the students, a self-test assignment. This assignment is not compulsory. For the students who return this assignment, a maximum of 20% of their final mark will come from this assignment. If students do not complete this assignment, their final grade will be calculated 100% from the final examination. These options permit some students to not completing their home assignments. Persisters likely concentrated more on the final examination. Sending self-test assignments does not guarantee a better score on the final exam since self-tests can be done at home with friends. The most important contribution to success is that students have read and understood all course materials before taking the final examination.

Examination Preparation

Preparation of students for final examinations was measured by students' possession of course materials, students' ability to read materials completely before the examination day, and students' self-confidence before taking the exam. As shown in Table 12, in general, persisters were more likely prepared for the final examination than drop-outs (mean=4.81 and 4.50

respectively, t=4.26, p<.01).

Persister groups (see Appendix A) tended to have purchased more of their own course materials than drop-outs (mean 5.22 and 4.75 respectively, t=5.07, p<.01). Again, persisters were more likely to read course materials before taking the final examination than drop-outs (means=4.39 and 4.18, t=2.02, p<.05). In terms of self-confidence before taking the final exam, persisters apparently feel more confident than drop-outs (mean= 4.81 compare to 4.59, t=2.49, p<.01).

It was important to ask respondents about possession of course materials since buying course material is not compulsory for students. Students can share the purchase of course materials with their friends, or they can borrow them from former students. However, sometimes students did not have the course materials for the course in which they have registered until the examination day. This problem may have been caused by the sell-out of materials at the regional center or by students' financial problems. It is hard to pass the exam without having the course material since most of the test materials are taken from the modules. The format of UT examinations (objective test format for most courses) may also contribute to a lack of motivation to purchase the module. Some students who either did not have or did not read the course

materials at all hoped that they could guess the answers in the final exam.

Reading and understanding the content of course material is necessary if students want to pass the examination. With the average mean score being 4.27 (see Table 12), completion of reading course materials by UT students is apparently still low for persisters as well as drop-outs. The classical reasons proposed are lack of time for studying or course difficulties. High level reading ability is necessary for distance learners, and for UT students especially, since printed materials are the main media used by UT for its instructional delivery. Students hope that they can study independently at home. The low level reading ability of UT students may relate to Indonesian communication tradition, which is oral communication. Considering that tradition it is of utmost importance, it is equally important that print-based material, as the single mode of instructional method for UT, be supplemented with other support materials such as audio/video cassette material, radio and television broadcasts, face-to-face tutorials and, if possible, teleconferencing and telephone tutorials.

Students' self-confidence before taking the examination may relate directly both to students' overall preparation and to their educational experiences. As

discussed earlier, persisters generally have both better preparation and higher educational backgrounds than do drop-outs.

Findings and Discussion of Open Ended Statements

There were 107 persisters and 148 drop-outs who completed the open-ended comment and statement column in the questionnaire. This column provides the opportunity for respondents to write down freely their comments, complaints, or suggestions related to their studies at UT. Their comments were classified into three categories: institutional problems, personal problems and general comments. Each type of comment received 3 to 36 responses. Since the variety of comments was very large, a minimal number of five similar responses was considered necessary for inclusion in the discussion. The only exception to this rule was when there were very strong and negative comments, which might indicate the need for some attention.

There was a slight difference in the results between persisters and drop-outs as to what they generally commented upon or complained about. In the area of institutional problems, persisters basically complained about course materials (content and language, and quality of printing and binding), examinations (results announcement), registration services and tutorials.

Table 15
Summary of Frequencies of Respondents' Comments

No	Type of Comments	Persistr Freq	Persistr %	Drop-out Freq	Drop-out %	Total Freq	Total %
A.	Institutional Problems						
1.	Course materials						
	a. Content & language	22	20.6	10	6.7	32	12.5
	b. Binding & printing quality	14	13.1	2	1.4	16	6.3
	c. Module size	5	4.7	5	3.4	10	3.9
2.	Examinations						
	a. Result announcement	28	26.2	8	5.4	36	14.1
	b. Item quality & difficulty	8	7.5	6	4.1	14	5.5
	c. Exam periods	8	7.5	-	-	8	3.1
	d. Supplemental exam schedule	7	6.5	-	-	7	2.7
	e. Exam location	6	5.6	1	0.1	7	2.7
3.	Tutorials	16	15.0	14	9.5	30	11.8
4.	Registration						
	a. Self test materials stock	7	6.5	1	0.1	8	3.1
	b. Quality & time of service	12	11.2	6	4.1	18	7.1
5.	Tuition						
	a. Student fee	4	3.7	14	9.5	18	7.1
	b. Module price	2	1.9	20	13.5	22	8.6
6.	Communication between UT and students	8	7.5	16	10.8	24	9.4
B.	Personal Problems						
1.	Jobs and family responsibilities	7	6.5	19	12.8	26	10.2
2.	Financial constraints	-	-	28	18.9	28	11.0
3.	Academic failure	6	5.6	13	8.8	19	7.5
4.	Can not study alone	3	2.8	8	5.4	11	4.3
C.	General questions related to reentry procedure	-	-	54	36.5	54	21.2
Total		163		225		388	

Note: N= 255; n persisters=107; n drop-outs=148. One respondent gave more than one comment, and the percentage was calculated from the number of respondents who gave comments.

On the other hand, drop-outs generally complained about tuition (student fees and module prices). They basically gave milder comments and complaints than persisters. They generally did not complain about institutional support services as a main cause for dropping out. They tended to blame their own personal problems such as lack of time for studying, financial problems or failure in a number of courses. This is different from what was anticipated. A considerable number of drop-out respondents also asked about the procedure for continuing their studies after more than two non-active years. A summary of respondents' comments and complaints is presented in Table 15.

Institutional Problems

Course Materials

Some respondents commented about the quality of printed materials (contents, language and printing quality). As many as 22 persisters (20.6%) and 10 drop-outs (6.7%) said that the content of some modules was not easy to understand and it was difficult to grasp the main idea. The language of some modules was not always clear, especially the courses which involve calculation, such as Mathematics and Statistics. The language used in these courses was considered to be too simple and to offer very short explanations.

The binding and printing quality of printed materials

also received complaints from some respondents, mainly persisters (13.1%). The paper quality was considered to be low and the module to be easily broken due to improper binding.

The size of the module was also of concern to the respondents. Five persisters (4.7%) and five drop-outs (3.4%) complained that the module size was too big, and thus, difficult to carry. They suggested that the size of the modules be reduced to permit bringing them to the work place since most UT students are working people. A few modules, such as the Religion course module, are smaller and students feel comfortable bringing those modules to work.

Examinations

Many aspects of examinations were commented upon by the respondents. However, the announcement of the examination results was the most frequent concern. 'Waiting for the examination results was frustrating'. This is one of the comments about the examination results announcement. The announcement of the examination results has become the top-ranked problem about which respondents complained. The majority of the complaints came from persisters. No fewer than 28 persisters (26.2%) and 8 drop-outs (5.4%) complained about this problem. They want the results of their examinations to be delivered in less

than 10 weeks after the last examination day. Currently, UT usually sends the examination results to the regional offices around 10 weeks after the examination. This period of time was regarded as too long by the students because they really can not continue their studies before they know whether or not they have passed. They are hesitant to register for new courses because, if they have failed any courses, they must take the supplemental examination in the following semester. Similar result of study was reported by Wihardit (1981).

Another aspect of examinations which respondents commented on was that the items were too difficult. This problem was mentioned by at least eight persisters (7.5%) and six drop-outs (4.1%). Certain courses, such as Mathematics and Statistics, are regarded as being too difficult by some students who have failed the examination several times. These courses usually are compulsory for most study programs, and if students can not pass these courses, they can not complete their studies. This condition has led to frustration, and in some cases it has led to drop-out.

Most UT students are 35 years or older. This group of students graduated from high school more than 17 years ago. At that time the new Math course (Mathematics) was not yet taught widely in Indonesian schools. A lack of

basic knowledge in Math is suggested as the main reason for failure in these courses. The year of high school graduation may also influence student performance. According to Tinto (1982), those mature students who reenter the higher education system after a number of years away from schooling will find it hard to study.

Other criticisms related to the examination was offered by persisters, such as too many examinations on one examination day (5 courses). They suggested that the examination be conducted on three Sundays each semester not on two; thus, a smaller number of them can be taken on each examination day. They also wanted examinations to be conducted three times a year instead of the present two times. Some respondents also suggested that supplemental exams should be conducted on a different day from the main examination day. The locations for examinations was regarded as being too far from their residences by some respondents and they suggested opening new examination places closer to their homes.

Student examinations at UT are conducted on two days (Sundays) every semester. One examination day is divided into 5 periods; thus, one student can take a maximum of 5 courses on one examination day or a maximum 10 courses per semester. On average, one student takes 15 credits (4-6 courses) per semester, so that 2-3 course examinations

will fall on one day. However, if 4-5 course examinations take place one day, it is tiring for the students. It is not likely that UT will add another examination day in the near future as that would mean increasing the budget and rearranging the examination schedules for all courses. It is suggested that the students arrange their courses so that they will not have write more than three examinations on a single day.

Some students proposed changing the academic calendar from two examination periods per year to three per year. Because of the age of many students, most students want to finish their studies as soon as possible. Waiting for the examinations which are conducted only every six months is regarded as too long. In 1986/1987, UT tried the three times a year system, but it did not work because UT personnel could not handle the work load. In 1987/1988 UT returned to the old system which only conducted examinations twice a year.

Although there were not many complaints about the aforementioned problems from the drop-out respondents, this does not mean that they were satisfied with those services. Drop-out students may no longer be concerned with these problems since they had already been non-active for more than two years when this study was conducted. Personal problems which contributed to the ending of their

studies, such as financial problems, jobs and family responsibilities, and possible means of returning to university may have become more serious concerns. These very problems were a common complaint among drop-outs and will be discussed in another section.

Another aspect of the examinations which needs to be addressed was the exam supervisor. Even though not many students complained about this problem, some students stated that exam supervisors should be trained. They do not treat the students as adults according to the respondents. The majority of exam supervisors are hired from local high school teachers. They usually deal with young people in their schools while most UT students are adults. This lack experience of the examination supervisors may account for some students' dissatisfaction.

Registration

Since UT improved the registration system in 1987/1988, there were not many complaints about this institutional aspect. Wihardit (1988) reported that problems with course registration have led in the past to the students stopping their studies. In this study, only certain aspects of registration were still the subject of complaints from some students, such as the availability of self-test materials in the regional center, and the

quality and timing of services. Seven persisters (6.5%) and only one drop-out (0.1%) complained about self-test material stocks not always being available at the regional center. Students receive self-test materials when they register for their courses. Sometimes these materials are out of stock, and students must wait until they are available; then they return to the regional center. This situation may make students dissatisfied since most of them are working, and they find it difficult to leave their workplace so often. Moreover, some staff at the regional center were neither friendly nor cooperative. There were at least 12 persisters (11.2%) and 6 drop-outs (4.1%) who complained about the quality and time of services for course registration at the regional centers. Some students suggested that UT improve the quality of service and increase the service hours at the regional centers to include evening and or weekends so that it will be easier for them to allocate their time.

Tutorials

A relatively large number of students complained about tutorial services. There were 16 persisters (15.0%) and 14 drop-outs (9.5%) who proposed that tutorials were a concern for them. The lack of tutorials makes it difficult to solve the problems they face in their studies. They also complained about the confusing

schedule of tutorials. They need more regular tutorials to serve as places to go to solve their academic problems and as media for socialization and communication among students.

UT has conducted intensive tutorials in some regional centers since 1989/90; however, the extra fee for tutorials that the students must pay hampers their participation. They complained that the fee for the intensive tutorial was very high, and they suggested that UT reduce it.

Tutorials have become an integral part of most distance education programs. Many distance education institutions have used tutorials (face-to-face or by telephone) as an effort to increase student completion rates (Laube, 1992, Rekkedal et al., 1983, Sweet, 1986).

Tuition

Tuition in this case includes the student fee and books/modules purchase. This problem was of more concern to drop-outs. There were 14 drop-outs (9.5%) and only 4 persisters (3.7%) who regarded student fees at UT as being too high. Module price was also a source of complaint in a relatively high number of drop-out students. Twenty drop-outs (13.5%) considered that course materials (modules) were too expensive, and they complained because UT often increased those prices. Only 2 persisters (1.9%)

commented about this issue.

The fees at UT are relatively the same as other public universities because the fees in public universities are controlled and subsidized by government. Thus, they are much cheaper than the average fee of private universities. Since the complaints about the module price and student fees come mainly from the drop-out respondents, it is argued that inability either to pay tuition, or to buy modules might contribute to student drop-out. The importance of financial support for study continuation is reflected in the comments and reasons given for dropping out.

Communication Between UT and Students

Lack of communication between UT and its students has apparently become an important indicator of what leads to student drop-out. It is the absence of peers and the sense of isolation of distance learners that brings discouragement to students studying at home (Harrington in de Freitas & Lynch, 1986). The importance of communication between UT and its students can be seen from comments given by drop-out respondents.

> "UT should actively communicate with students and send reminders especially to non-active ones. Because of daily business and with no friends to remind me, I lost motivation to continue my studies".

A similar comment was given by another student as follows:

> "This letter (survey materials) has reminded me to continue my program of study".

A clear expression of the importance of communication is illustrated by the following example.

> "I am very happy to receive this questionnaire. I think that this questionnaire has a positive impact on me and has provided me with encouragement. It also caused me to continue my studies that were stopped because of many problems".

At least 16 drop-outs (10.8%) and 8 persisters (7.5%) said that UT should improve its communication with its students. Some students said that communication with UT is difficult to do through mail or telephone, and often there is no reply to their complaints. Some of the respondents felt dis-oriented, because they did not know where they have to go to get information. Information about UT and its development is difficult to find. They suggested that UT more frequently use national mass-media, such as nationally circulated newspapers or government television broadcasts, to provide information to its students since the students are spread throughout the country.

Personal Problems

Jobs and Family Responsibilities

Jobs and family responsibilities are common reasons given by students for dropping-out. There were at least 19 respondents from the group of drop-out students (12.8%) who gave the lack of time for studying as the reason that they stopped their studies. Seven persisters (6.5%) stated the same problem. One of the drop-out students' comments is cited here as follows:

> "I like to study at UT; however, my activities and responsibilities in my job as a field staff hampered my studies. Even though I already managed my time properly, I do not have enough time for studying because I often work until late evening".

As distance learners and working people, UT students must manage their time wisely. They must provide time to study in between their daily activities. Since there is no face-to-face teaching activity, modules (as the main course material) should be read properly. Without enough time for studying course materials, it is hard to pass the examination. One of the persisters' comments about his key to success is as follows:

> "Successful studying at UT is determined by hard work, high motivation and strict time management".

Another persister suggested that UT students should

not register for too many courses in one semester. As working people, they have to coordinate the time they have for studying with the number of courses taken. He suggested that students with full time jobs take only 4 courses or 12 credit units every semester if they want to pass all of the courses. He further explained that most of his colleagues in his former study group had already graduated, but he had not yet completed his studies. He took 6-9 courses (18-27 credit units) every semester. He made this decision because he does not really need the degree. The most important thing is that he learns something from the modules and now his employer trusts him to handle more complicated jobs even though he has not yet completed his degree. According to Hezel & Dirr (1991), distance learners must assess not only how much time they will need to devote to their academic work, but also what periods of time they have available for study purposes during each day of the week.

The aforementioned student explanation is quite valid. Most UT students are already over age thirty five (see Table 3). Because of age considerations, they want to finish their studies as soon as possible. They tend to take more courses than they can complete. Too many failed courses can lead to discouragement and the loss of motivation.

Financial Problems

Even though UT is not an expensive university compared to other public universities (in fact, it is much cheaper than the average private university and students do not need to go to campus every day), financial problems were the most common reason given by students for dropping-out. There were 28 drop-out students (18.9%) who explained explicitly that they left university due to financial constraints.

More than 73% of the drop-out students are married people with children (see Table 4), and more than 44% are civil servants (see Table 5). Civil servants in Indonesia have a much lower salary compared to private or government owned company employees. Low salaried students with family responsibilities usually give the first priority to their family, and continuing studying comes second. Some respondents commented that they stopped their studies temporarily because they could not afford to pay tuition and buy books. Their children needed more money for continuation of their own studies. They gave first priority to their children's education and other family needs.

Most students who drop-out due to financial problems want to return to the university later. However, if their reason for withdrawing involved academic failure as well

as financial problems, they will find it hard to come back.

Academic Failure

Kennedy and Powell (1976) argued that students quite naturally tend to ascribe the reasons for their actions to outside forces, such as job pressures, rather than such personal factors as the lack of motivation, preparation or ability. Results of this study correspond with this statement. Only 13 drop-outs (8.8%) offered academic failure (too many failed courses or certain courses too difficult) as a main reason for discontinuing their studies.

Self-directed Study

The nature of the distance education system demands that students study alone and manage their pace without depending extensively on help from tutors or friends. Course materials have been designed to meet this purpose. However, many distance education students still find it hard to study alone. At least three persisters(2.8%) and eight drop-outs (5.4%) stated that they had difficulties in studying alone with printed materials without help from teachers or fellow students.

Success in studying at UT is very much determined by the ability of the student to read and understand printed course materials. As discussed earlier, many students

have difficulties in understanding course materials. It is argued that students' difficulties in studying alone and mastering course materials may not be merely due to difficulties with course materials but may also relate to the communication culture (see chapter 2) that results the low level of reading ability. This lack of reading practice in combination with the dominant cultural tradition helps to explain why Indonesian people do not like to study by distance education based on printed course materials. Some respondents stated that they prefer to study in conventional universities rather than by correspondence. They stated that they will continue their studies at UT if provided with more help from tutors and with more frequent face-to-face lectures.

General Statements

It is argued that drop-out caused by academic failure will lead students to leave college for good. However, drop-out caused by jobs, family, financial or other similar problems does not always mean that the student leaves the university forever. This phenomenon was illustrated by many student statements. There were at least 54 drop-outs (36.5%) who stated that they wanted to return to UT and asked about reentry procedures. The majority of them stated that they dropped out due to financial problems or family and job responsibilities.

They seriously want to finish their studies after they cope with current constraints.

As well as complaints, there were some students who expressed their personal satisfaction with their program:

> "I am very satisfied with my studies at UT. I feel confident that UT graduates have the same quality as those of conventional universities since UT has clear and qualified course materials".

Another student stated that:

> "Everything is fine with my program. Success is dependent on the individual students being more disciplined as they study and manage their time, especially for those who are busy with their jobs".

Some students expressed their satisfaction with UT academic and administrative services.

> "I am satisfied enough with academic and administrative services at UT headquarters and at the regional center".

Another student wrote:

> "I am happy because UT was very responsive in answering students' complaints through the mass media".

Positive expression and feedback from students may encourage UT to continue to improve its services to students.

CHAPTER 5: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Conclusions

In this study, the characteristics of persisters and drop-outs at Universitas Terbuka and differences between both groups of students were investigated. In summary, there were three patterns that marked the two groups. First, persisters were significantly different from drop-outs in age, employment status, and previous educational background. They tended to be older (the majority between 31 and 45) and to have higher levels of educational background. Second, the students who worked in government-owned companies had the highest percentage of persisters when compare to other group on the study. On the other hand, those who worked as civil servants were likely to have the highest proportion of drop-outs. Third, even though there was no significant difference in study time between persisters and drop-outs, the amount of time allocated for the study programs by both groups of students was lower than suggested by the university.

In general, both groups of students felt satisfied with the academic environment and integration. Institutional factors were not important factors associated with student drop-out. However, certain aspects of the academic environment, such as examination

results announcement, availability of course materials and registration forms, and the tutorial system, have a significant relationship with student drop-out or with which students felt less satisfied.

Participation of students in social integration was very low. Drop-out students made less frequent contact with the regional centers; however, they attended more tutorials than persisters. The low level of student participation in social activities may be due to lack of social activities conducted by UT and difficulties in allocating time which hampered students efforts to participate.

Goal and institutional commitment was likely to be the most important indicator of students who would persist and those who would drop-out from Universitas Terbuka. Persisters tended to have better goal satisfaction and motivation, institutional commitment, and examination preparation.

The open-ended responses were categorized into institutional problems, personal problems, and general statements. There were basic differences between persisters and drop-outs in the issues they raised. In institutional problems, persisters generally complained about course materials (especially content and language), examinations (mainly the announcement of the results),

registration and tutorials. On the other hand, drop-outs mainly complained about the tuition (students fees and module prices). Both groups of respondents complained about problems in communication between UT and students.

Job and family responsibilities, financial constraints, difficulties in studying alone, and academic failure were the most common personal problems proposed by students that hampered their studies. These problems were mainly suggested by drop-outs. A considerable number of drop-outs asked about the reentry procedures after a couple years out of the programs. The students who dropped-out due to financial constraint or job and family responsibilities were likely to come back and continue their programs after they had coped with those problems.

In order to succeed in studying at UT with its distance education system, greater self-motivation, effective reading and studying, and time management skills were required. Students should be able to study without much dependence on face-to-face teaching, peer support and criticism. In studying while dealing with job and family responsibilities, the allocation of time study is important.

Reconsidering the Use of Kember's Model

Since there is a limited number of theoretical models that facilitate an investigation of the problems

associated with drop-out in distance education, Kember's linear process model of drop-out from distance education, that is based on Tinto's model, was used in this study. The model has helped to provide a theoretical framework to investigate student persistence and drop-out from Universitas Terbuka.

Kember's model was originally intended for causal studies. Data for this study were collected from the subjects who already dropped-out or were close to completing their studies. Thus, the correlation between factors and the decision to drop-out or persist was not causal. The impact of drop-out or persistence may influence their perceptions. For future research, it would be useful to attempt to predict factors that cause student persistence or drop-out. This study should be conducted upon first registration, and students should be tracked until they decide either to drop-out or to complete their studies.

In applying the model, not all aspects of the model were utilized in this study and the model was applied in different context of study. Even though, in general,the model was a good fit with the Universitas Terbuka context, certain variables of the model showed very low scores, e.g. social integration variable. Careful consideration should be made if this study is to be replicated.

Limitations

One of the limitations of the study was the sampling method. The sample was randomly drawn from the UT student data records. The sample drawn with this sampling method was difficult to control in order to have the number in the sample proportionally represent the number of students in every faculty and regional center.

Another limitation was that the return rate of the survey materials was relatively low. A follow-up letter to the subjects and a longer time for the survey period may have increased the return rate. However, a limited budget and the relatively short time period allocated for the study hampered the completion of those steps.

Even though the Likert scale questionnaire was changed from five to six to avoid the tendency of choosing the mid-point, some respondents gave moderate responses for most items. It is difficult to judge whether or not the subjects' answers reflected their beliefs. Cultural background may also contributed to the respondents' answers. Some respondents may have hesitated to give either a negative response or a strong criticism. Interviews with a number of subjects following the mail survey may have been useful to validate their answers.

Recommendations

The open university program is relatively new in Indonesia and most of the students may not know how to study effectively in a distance education program. For example, most students did not know what amount of time they have devote to their studies and how to use their study time effectively. Further, some students take more courses than they can complete. Too many failed courses can lead to discouragement and the loss of motivation. It is recommended that UT provide more guidance to its students, especially to new students in relation to study strategies in a distance education system. A study guide book should be provided, and the pre-registration orientation program should be improved in order to provide better preparation for new students to become more self-directed and self-motivated, thus increasing the degree of persistence across students and lowing the drop-out rate.

In general, both groups of respondents were sufficiently satisfied with the institutional support services. However, certain aspects of some services need to be reviewed and changed. It is recommended that UT give special attention to the institutional aspects that were less satisfying to students or were often the target of complaints. Among those services, revision of course materials, the announcement of exam results, tutorials and

communication with students should receive special attention. For example, the perception of course materials did not differentiate persisters from drop-outs; nevertheless, UT should not be satisfied with the current course materials. This study was not specifically designed to evaluate the quality of UT course materials, and the items created for that purpose were very general. Specific studies should be conducted to evaluate each course since certain subjects such as Mathematics, Statistics, Economics or other courses require specific presentation approaches for distance learners.

Amin (1990) and Suciati (1990) both reported a number of difficulties faced by students in understanding course materials. UT's plans to produce audio-cassettes for each course, and radio and television programming as integral parts of printed material by 1996 and its plans for revision of printed courses material at least every 8 years (Universitas Terbuka, 1992) should be realized immediately. A first priority for revision should be given to courses where there has been a number of student complaints and where modification have been suggested.

Many students complained about the size of the modules. UT can address this student complaint by reducing their size, in addition to revising the content and quality of the modules. Recently, UT printed

materials have also been used by conventional university students as main texts or as reference material. Improving the quality of those materials would increase UT's credibility in the community and may result in closer parallels with other progressive state universities in the country.

UT's instructional system is based on the use of printed-course materials (modules) as the main form of instructional media. Apart from the financial problems and job and family responsibilities, the failure of many UT students may be due to the lack of ability to read and understand the course materials since the Indonesian culture emphasizes oral communication. Dunbar (1991) reported that the exclusive use of textbook-based media in the UT instructional system may not suit students acculturated to education in which oral communication is emphasized. If this assumption is valid, it is time for UT to make an effort to solve this problem, such as by establishing a study center that provides instructional aids and tutors to help students who have difficulties in studying course materials alone. The existence of a study center will facilitate students meeting with tutors or counsellors, provide study room for those who can not study alone at home, and provide a place for academic and social activities and medium for meeting friends.

Many students complained about the difficulty of test items. The final semester examination is primarily an evaluation instrument used to measure students' achievement. To maintain the high standard of UT's test items, regular evaluation and revision should be conducted. However, failure in examinations may be also caused by the lack of the students' preparation as well as difficulty in test items. Some students reported that they did not buy or have course materials until the examination day. It is suggested that the purchase of course materials be made compulsory when students register for courses.

The late announcement of examination results has become a serious concern. Similar results were reported by Wihardit (1988). He stated that waiting too long for the exam results was one of the reasons given for students not registering in the following semester. Since this problem has already been noted repeatedly by the majority of students, UT should give special attention to finding a way to solve this problem. If not, students will be frustrated and lose their motivation to study; the end result will be drop-out.

Proposals for new locations for examinations continue to come from the students. UT must consider arranging an examination in a new location if the number of students

who reside at that location is sufficient.

Distribution of registration forms and course materials also has become a concern of students. UT still needs to improve the availability of registration forms. The number of post offices that currently sell these forms should be increased, and the control system to monitor the number of forms remaining in every post office should be improved. If these forms are not available, students can not register for their courses nor supplemental examinations. This short coming could influence their motivation when deciding whether or not to continue studying.

The registration system which is applied by UT may have an indirect impact on the purchase of course materials. The length of the registration period (three months in one semester) might influence students to delay registration until the last month or even the last week of registration. Consequently, students will not have enough time to prepare for exams if modules are in short supply during the last week of registration. To prevent these circumstances, regional centers should predict the number of modules needed for every course in the next registration period. Prediction can be based on a needs survey when students come to register at the regional center. Students should be encouraged to register early

for courses so that an accurate prediction for the upcoming semester can be made.

Another institutional service concern is registration services at the regional centers, especially the amount of time for that registration services and the speed of the registration process. If tutorials and examinations can be conducted on Sunday, registration also can be held at other times. It is time for UT to consider offering students' registration on Sundays, for a few weeks during the registration period. This improvement of services may also have a positive impact on the number of registered students.

Tutorials have become an integral part of instructional delivery in many distance education programs. It is suggested that UT must continue to improve its tutorial services and must keep the cost as low as possible in order to attract more students. Face-to-face tutorials have an important role at UT. Tutorials are places for students to go to deal with academic and general problems, to obtain study skills, and even to get counselling (Hiola and Moss, 1989). It is also important to provide an opportunity for students to meet other fellow students in order to reduce boredom and loneliness caused by the nature of distance education system and to give stimulus to intellectual development.

Students' participation in social integration was reported as very low in this study. Low participation of students in social activities may be due to the facts that the majority of students are working people and that they do not enough time to take part in such activities. Another reason for such low participation may be that the number of activities provided by the institution was insufficient. UT might need to improve both the quality and the quantity of social activities in order to attract more students to participate.

According to Tinto (1975), lack of integration into the social system of the college will lead to low commitment to that social system, and it will increase the probability that individuals will decide to leave college and pursue alternative activities. Because of the nature of distance education, integration into the social system of the university tends to be lower than in a conventional university. A sense of isolation and loneliness may lead students to quit. Alternative activities that promote students' persistence should be encouraged such as tutorials, regular social and sport activities, academic activities such as monthly seminars and scientific discussions. Regional centers should help and encourage students to form study groups where they can meet regularly with their peers. Kember (1986) suggested that

institutions should arrange access to study rooms to encourage the study habits of individuals where the home environments are unsuitable for study. The program of establishing UT study centers within its facilities, initiated in 1992, should be completed at a faster rate. The existence of study centers is considered crucial for UT because program continuation is dependent on finding a study location away from home. Failure to provide study halls is viewed as lack of support from the institution.

Difficulty in communicating with UT was a common complaint. Some students suggested an open info-line that would operate 24 hours a day to serve and provide information for the students. The same communication problem was reported by Wihardit (1988), but there is no indication that UT will provide such an info-line. It is important for UT to provide a 24 hour info line so that students can communicate with UT anytime, since most UT students are busy people with both job and family responsibilities.

Students who drop-out due to job and family problems or financial constraints tended to come back to the program after they had coped with those problems. This is an interesting development that should serve to remind UT to try to maintain communication with non-active students. This issue should be given special attention in order to

re-attract the students; this should be in addition to improving other student support services and course materials. Regular communication through personal mail may not be cost effective. However, information through mass media, such as newspapers or national television networks, may be the best alternative and an effective way to keep contact with potential and ongoing students.

REFERENCE

American Psychological Association (1991). Publication Manual of the American Psychological Association. Third edition. Washington, D.C.

Amin, Z. I. (1990). A case study of the Indonesian Open Learning University. Development in distance education in Asia: an analysis of five case studies. Bangkok: Unesco.

Amundsen, C. L., & Bernard, R. M. (1989). Institutional support for peer contact in distance education: An empirical investigation. Distance Education, 10(1), 7-27.

Baath, J. (1984). Research on completion and discontinuation in distance education. Epistolodidaktika, 1(2), 31-43.

Bartels, J. & Willen, B. (1985). Drop-out: Problems of comparing drop-out in different distance education systems. 1-10. (Eric Document Reproduction Service No. ED 318 391.

Bernard, R. M., & Amundsen, C. R. (1989). Antecedents to dropout in distance education: Does one model fit all? Journal of Distance Education, 6(2), 25-46.

Billingham, C. J., & Travaglini, J. (1980). Predicting adult academic success in an undergraduate program. Alternative Higher Education, 4,(4), 169-182.

Bureau of Academic Administration and Student Affairs (1992). Statistik Mahasiswa Tahun 1991 (Students' Statistic of 1991). Jakarta: Universitas Terbuka.

Cookson, P. S. (1989). Research on learners and learning in distance education. The American Journal of Distance Educaiton. 3 (2). 22-34.

De Freitas, K. S., & Lynch, T. (1986). Factor affecting the students success at the National Open University of Venezuela. Distance Education, 7(2), 179-198.

Dunbar, R. (1991). Adapting distance education for Indonesians: Problems with learner heteronomy and a strong oral tradition. Distance Education. 12.(2), 162-174.

Garrison, D. R. (1987). Researching dropout in distance education. Distance Education, 8(1), 95-101.

Hall, E. R. (1984). A follow up survey of dropouts: Who responded and how valid were their answers? (Paper presented at the Annual Meeting of the American Educational Research Association 68th), New Orleans, April 23-27. (Eric Document Reproduction Service No. ED 245647).

Hezel, R.T. & Dirr, P. J. (1991). Understanding television - base distance education: Identifying barriers to university attendence. Research in Distance Education. 3(1). 3-21.

Hiola, Y. & Moss, D. (1989). Face-to-face tutorial provision in the Universitas Terbuka (The Open University of Indonesia). Distance Education, 10(2), 258-270.

Hiola, Y. & Moss, D. (1990). Characteristics of distance learners at the Universitas Terbuka (Open University) Indonesia. Distance Education, 11(1), 116-24.

Homberg, B. (1977). Distance Education: A Survey and Bibliography. New York: Nicholas Publishing Company.

Howard, W., Schultz, H., Sacchitello, C., & Lucas, J. A. (1983). Study of students who withdrew from courses at the Hawthorne and Northeast Centers 1981-1982. Office of Planning and Research William Harper College. Palatine, Illinois. (Eric Document Reproduction Service No. 233 765).

Keegan, D. J. (1980). Drop-out at the open university. The Australian Journal of Education. 44-55.

Keegan, D. (1986). Foundation of Distance Education. London, New York: Routledge.

Kember, D. & Dekkers, J. (1987). The role of study centres for academic support in distance education. Distance Education, 81), 4-17.

Kember, D. (1989). An illustration with case studies of a linear process model of dropout from distance education. Distance Education, 10(2), 197-211.

Kember, D. (1990). The use of a model to drive interventions which might reduce drop-out from distance education courses. Higher Education, 20(1), 11-24.

Kennedy, D., & Powell, R. (1976). Student progress and withdrawal in the open university. Teaching at a Distance, (7), 61-75.

Kirkwood, A. (1987). Enabling new students to examine their expectations of distance learning. Some example from British and Australian tertiary institution. Paper presented at the International Conference on The First Year Experience, Shouthampton, England. ERIC Documentation No. ED 304 221.

Laube, M. R. (1992). Academic and social integration variables and secondary student persistence in distance education. Research in Distance Education, 4(1), 2-9.

Maxwell, M. (1979). Improving student learning skill. A comprehensive guide to successful practice and programs for increasing the performance of underprepared students.
San Fransisco, California: Jossey-Bass, Inc. Publishers.

Munro, J. (1987). The discourse of dropout in distance education: A theoretical analysis. (Paper presented at the Annual Conference of the Canadian Association for the Study Of Adult Education), Calgary, Alberta. (Eric Document Reproduction Service No. 310 752).

Norusis, M. J./SPSS Inc. (1990). SPSS/PC+4.0 Base Manual for the IBM PC/XT/AT and PS/2. Chicago: SPSS Inc.

Norusis, M. J./SPSS Inc. (1990). SPSS/PC+ Statistics 4.0 for the IBM PC/XT/AT and PS/2. Chicago: SPSS Inc.

Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. Journal of Higher Education, 51(1), 60-75.

Paul, R. (1990). Toward a new measure of success: Developing independent learners. Open Learning. 6(1). 31-38.

Phythian, T., & Clements, M. (1982). Drop-out from third level math courses. Teaching at a Distance, (21), 35-45.

Prummer, C. (1990). Study motivation of distance students a report on some results from a survey done at the Fern Universitat in 1987/1988. Research in Distance Education, 2(2), 2-6.

Rekkedal, T. (1982). The drop-out problem and what to do about it. In Daniel, J. S., Stroud, M. A. & Thompson, J. R. Learning at a Distance. Edmonton: Athabasca University/International Council for Correspondence Education.

Rekkedal, T. (1983). Enhancing student progress in Norway. Teaching at a Distance. 23, Summer 1983, 19-24.

Robert, D. (1984). Ways and means of reducing early student drop-out . Distance Education. 5(1). 50-71.

Robert, D., Boyton, B., Buete, S., and Dawson, D. (1991). Applying Kember's linear process model to distance education at Charles Sturt University-Riverina. Distance Education. 12(1), 162-174.

Scriven, B. (1991). Ten Years of 'Distance Education'. Distance Education. 12(1), 137-153.

Shale, D.G. (1982). Attrition: A case study. In Daniel, Stroud & Thomson (1982). Learning at a Distance. Edmonton: Athabasca University / International Council for Correspondence Education. 113-117.

Suciati (1990). The effect of motivation and academic achievement in a distance education setting: An examination of latent variables in an Indonesian case. Dessertation. Syracuse University.

Sweet, R. (1986). Student dropout in distance education: An application of Tinto's model. Distance Education, 2(7), 199-213.

Tabachnick, B. G. & Fidell, L. S. (1989). Using Multivariate Statistics. Second Edition. New York: Harper Collins Publisher.

Taylor, J. C. (1986). Student persistence in distance education: A cross-cultural multi-institutional perspective. Distance Education. 7(1).

Thompson, G. (1984). The cognitive style of field-dependence as an explanatory constuct in distance education drop-out. Distance Education. 5(2).

Thompson, G. (1989). The provision of student-support services in distance education: Do we know what they need? Post-Secondary Distance Education in Canada. 43-50.

Thompson, G. (1990). How can correspondence-based distance education be improved? A survey of attitudes of students who are not well dispossed toward correspondence study. Journal of Distance Education. 5 (1). 53-65.

Tinto, S. (1975). Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 45(1), 89-125.

United Nations Educational, Scientific and Culture Organization (UNESCO)/ International Council for Distance Education (1990). Development in Distance education in Asia: An analysis of five case studies. Bangkok.

Universitas Terbuka (1991). Katalog dan Suplement (Catalog and Supplement). Jakarta: Universitas Terbuka.

Unversity of Victoria (1991). The Distance Education Style Guide. University of Victoria: Distance Education Services, Unversity Extention.

Verduin, J. R., & Clark, T. A. (1991). Distance Education: The foundation of effective practice. Jossey-Bass Publishers. San Fransisco - Oxford.

Wihardit, K. (1988). Non-registered students at Universitas Terbuka. Thesis. Simon Fraser University.

Wong, A. T. & Wong, S. C. P. (1979). The relationship between assignment completion and the attrition and achievement in correspondence courses. The Journal of Educational Research. 72(3), 165-168.

Woodley, A., & Parlett, M. (1983). Student Drop-out. Teaching at a Distance, (24), 2-23.

Woodley, A. (1983). Why they declined the offer. Teaching at a Distance, (23). 2-7.

APPENDIX A

Item Factor Loadings, Mean Score, T-value and Significant Difference Between Persisters and Drop-outs

Item	Loading	Mean Score			t
		Perst	D-out	Total	
Academic and Institutional Integration					
1. I find it easy to understand the content of UT course materials.	.87	4.31	4.26	4.28	.50
2. I am find that the language used in UT course materials is clear and easy to understand.	.76	4.42	4.48	4.46	-.77
3. I am satisfied with the design and form of UT's module	.63	4.58	4.62	4.60	-.47
4. I find that the price of UT's module is relatively cheap.	.42	3.89	3.82	3.85	.60
5. I am satisfied with the service of examination registration and notification of examination participants.	.67	4.51	4.36	4.42	1.47
6. I find that test items of UT courses are relatively easy.	.35	3.51	3.64	3.59	-1.38
7. I am satisfied with the service of examination commitee and supervisor.	.79	5.01	4.89	4.93	1.65
8. I am satisfied with the announcement and delivery of examination results.	.75	3.98	4.26	4.15	-2.62**
9. I do not find it difficult to obtain (purchase) registration/ examination form.	.56	5.15	4.94	5.01	2.42*
10. I am satisfied with the registration services.	.79	4.98	4.86	4.91	1.60
11. I do not find it hard to obtain (purchase) textbooks or modules I need.	.63	4.92	4.42	4.62	5.13**
12. I am satisfied with intensive tutorial system conducted to replace regular tutorial	.43	3.90	4.17	4.06	-2.63**

Appendix (continues)

Item	Loading	Mean Score: Perst	Mean Score: D-out	Mean Score: Total	t
13. I feel that attending tutorials at the regional center has a positive influence on my study	.81	4.73	4.76	4.75	-.19
14. I believe that taking participation in study group tutorial had a positive influence on my motivation and my achievement	.65	4.97	5.02	5.01	-.24
15. I feel that taking part in social activities at regional center has a positive influence to my motivation for studying	.82	4.65	4.95	4.82	-.95
16. I feel that contact with the regional center has a positive influence on my motivation for studying	.66	4.84	4.74	1.75	.91
17. I am satisfied with the extent of my intellectual development since enrolling in this university.	.48	4.93	4.73	4.81	2.36*
Social Integration					
18. Level of attending intensive tutorial at regional center	-.68	1.34	1.70	1.56	-4.56**
19. Level of attending intensive tutorial at study group	-.69	1.31	1.76	1.58	-4.64**
20. Level of participation in social activities at regional center	-.68	1.15	1.10	1.12	1.30
21. Level of contact with regional center.	-.43	2.04	1.55	1.75	6.04**
Goal and Institutional Commitment					
22. I am confident that I made the right decision in choosing to attend this university.	.55	5.19	4.91	5.02	3.56**
23. I feel that it is important for me to graduate from this university.	.84	5.44	5.14	5.26	3.94**

Appendix (continues)

Item	Loading	Mean Score			t
		Perst	D-out	Total	
24. I would improve my job or get a new job if I graduate from this university	.61	4.75	4.36	4.52	3.59**
25. It is likely that I will register for other courses next semester	.46	5.07	4.54	4.76	4.95**
26. I encourage my colleagues in the workplace or community to attend this University	.77	5.21	4.99	5.08	2.89**
27. I had my own text or module for every course that I registered in	.78	5.22	4.75	4.93	5.07**
28. I always completed the home assignments.	.66	4.58	4.79	4.70	-2.06*
29. I completely read all the materials before final exam.	.69	4.39	4.18	4.27	2.02*
30. I feel confident before taking the final exam.	.63	4.81	4.59	4.68	2.49**

Note: Perst=Persisters. D-out=Drop-outs.
N=482 (n Persister=195; n Drop-out=287) except item 13 (n Persisters=44, n Drop-out=142), item 14 (n Persister=31, n Drop-out=121), item 15 (n Persister=17, n Drop-out=22), item 16 (n Persister=126, n Drop-out=126).
Mean (except item 18 to 21):
1=strongly disagree; 2=disagree; 3=somewhat disagree; 4=somewhat agree; 5=agree; 6=strongly agree.
Item 18 and 19: 1=never; 2=4 times or less; 3=5-8 times; 4=9-12 times; 5=13 times or more. Item 20 and 21: 1=never; 2=3 times or less; 3=4-6 times; 4=7 times or more.
*: p<.05. **: p<.01.

APPENDIX B

QUESTIONNAIRE (ENGLISH)

PART I

Please circle the information requested.

1. **Sex**
   1. Male 2. Female

2. **Your age this year is .....years.**

3. **Marrital status**
   1. Single
   2. Married without children
   3. Married with children
   4. Other without children
   5. Other with children

4. **Employment status**
   1. Civil Servant
   2. Army
   3. Goverment Owned Company Employee
   4. Private Company Employee
   5. Enterpreneur
   6. Not employed

5. **If you work, how many hours do you work per week?**
   ...hours.

6. **Before attending Universitas Terbuka what is your highest educational background?**
   1. High School graduate
   2. Some years experience in university
   3. Diploma Degree
   4. B.A.
   5. Master or Doctor

7. **On average how much time do you study for your program per week?**
   1. less than 5 hours
   2. 6-10 hours
   3. 11-15 hours
   4. 16-20 hours
   5. 21-25 hours
   6. more than 25 hours

8. **What is your main reason for choosing UT?**
   1. Could not get admitted in other universities
   2. I can study while working
   3. Study cost at UT relatively cheap

9. What is your main goal for attending UT?
   1. Make new and interesting friends
   2. Escape or get relief from boredom
   3. Improve or get ahead on job or new job
   4. Required by some authority (employer)
   5. To seek knowlege

Part II.

The following items represent aspects of your educational experience. Please indicate HOW STRONGLY YOU AGREE with each item. Respond to each item ONLY AS IT APPLIES TO YOU by circling one choice according to the following scale:

1 = strongly disagree
2 = disagree
3 = somewhat disagree
4 = somewhat agree
5 = agree
6 = strongly agree

1.	I find it easy to understand the content of UT course materials.	1	2	3	4	5	6
2.	I am find that the language used in UT course materials is clear and easy to understand.	1	2	3	4	5	6
3.	I am satisfied with the design and form of UT's modul.	1	2	3	4	5	6
4.	I find that the price of UT's module is relatively cheap.	1	2	3	4	5	6
5.	I am satisfied with the service of examination registration and notification of examination participants.	1	2	3	4	5	6
6.	I find that test items of UT courses are relatively easy.	1	2	3	4	5	6
7.	I am satisfied with the service of examination committee and supervisor.	1	2	3	4	5	6
8.	I am satisfied with the announcement and delivery of examination results.	1	2	3	4	5	6

9.	I do not find it difficult to obtain (purchase) registration/ examination form.	1	2	3	4	5	6
10.	I am satisfied with the registration services.	1	2	3	4	5	6
11.	I do not find it hard to obtain (purchase) textbooks or modules I need.	1	2	3	4	5	6
12.	(a). Please indicate how many times did you attend intensive tutorial conducted by regional center in last year during your study at UT a. Never (continued to no. 13) b. 4 times or less c. 5-8 times d. 9-12 times e. 13 times or more						
	(b). I feel that attending tutorial at regional center has a positive influence on my study	1	2	3	4	5	6
13.	I am satisfied with the intensive tutorial system conducted to replace the regular tutorial	1	2	3	4	5	6
14.	(a). Please indicate, how many times do you attend intensive tutorial at your study group in last year during your study at UT a. Never (continued to no. 15) b. 4 times or less c. 5-8 times d. 9-12 times e. 13 times or over						
	(b). I believe that taking part in study group tutorial had a positive influence on my motivation and my achievement	1	2	3	4	5	6

15. (a). Please indicate, how many times did you take participation in social activities such as sports, new students orientation day, communuty service etc. conducted by the regional center in one year during your study at UT

a. Never (continue to no. 16)
b. 3 times or less
c. 4-6 times
d. 7 times or more

(b). I feel that taking part in social activities at regional center has positive influence on my motivation for studying 1 2 3 4 5 6

16. (a). Please indicate, how many times do you make contact with regional center every semester
a. Never (continue to no 17).
b. 3 times or less
c. 4-6 times
d. 7 times-over

(b). I feel that contact with the regional center has a positive influence on my study. 1 2 3 4 5 6

17. I am satisfied with the extent of my intellectual development since enrolling in this university. 1 2 3 4 5 6

18. I am confident that I made the right decision in choosing to attend this university. 1 2 3 4 5 6

19. I feel that it is important for me to graduate from university. 1 2 3 4 5 6

20. I would get a job or new job if I graduate from this university 1 2 3 4 5 6

21. It is likely that I will register for other courses next semester. 1 2 3 4 5 6

22.	I like to encourage my colleagues in the workplace or the community to attend this University.	1	2	3	4	5	6
23.	I had my own text or module for every course that I registered.	1	2	3	4	5	6
24.	I always completed the home assignments.	1	2	3	4	5	6
25.	I completely read all the materials before final exam.	1	2	3	4	5	6
26.	I feel confident before taking the final exam.	1	2	3	4	5	6

PART III

Please feel free to write comments or suggestions in this column in relation to your study at Universitas Terbuka and to the academic and administrative services provided by the university to the students.

APPENDIX C

KUESIONER (INDONESIAN)

BAGIAN I

Mohon dilingkari/diisi satu keterangan yang paling sesuai dengan keadaan Anda.

1. Jenis kelamin
   1. Laki-laki
   2. Perempuan

2. Umur Anda saat ini:.....tahun

3. Status Perkawinan
   1. Belum menikah
   2. Menikah tanpa anak
   3. Menikah dengan anak
   4. Duda/janda tanpa anak
   5. Duda/janda dengan anak

4. Status pekerjaan
   1. Pegawai Negeri
   2. ABRI
   3. Pegawai BUMN
   4. Pegawai Perusahaan Swasta
   5. Wiraswasta
   6. Tidak bekerja

5. Jika Anda bekerja, berapa jam Anda bekerja per minggu?
   .....jam.

6. Sebelum mengikuti kuliah di Universitas Terbuka, apakah latar belakang pendidikan anda yang tertinggi?
   1. SMTA
   2. Pernah kuliah beberapa tahun di perguruan tinggi
   3. Diploma
   4. Sarjana Muda/Sarjana
   5. Master/Doctor

7. Secara rata-rata berapa jam Anda belajar seminggu selama kuliah di UT?
   1. Kurang dari 5 jam
   2. 6-10 jam
   3. 11-15 jam
   4. 16-20 jam
   5. 21-25 jam
   6. Lebih dari 25 jam

8. Apa alasan utama Anda memilih UT?
   1. Tidak diterima di perguruan tinggi negeri lain
   2. Bisa kuliah sambil bekerja
   3. Biaya kuliah di UT relatif murah

9. Apa tujuan utama Anda mengikuti kuliah di UT?
   1. Ingin bersosialisasi dan mendapatkan teman
   2. Ingin melepas kejenuhan dari kerutinan kerja
   3. Ingin meningkatkan pekerjaan atau mendapatkan pekerjaan yang lebih baik
   4. Diwajibkan oleh atasan untuk meningkatkan jabatan dalam pekerjaan
   5. Hanya ingin menambah ilmu dan memperluas wawasan

Bagian II.

Pernyataan-pernyataan berikut mewakili aspek-aspek pengalaman Anda selama belajar di UT. Mohon ditanggapi seberapa jauh Anda setuju dengan setiap pernyataan tersebut. Tanggapi setiap pernyataan sesuai dengan pengalaman Anda dengan cara melingkari satu pilihan (angka 1 s/d 6 di belakang setiap pernyataan) menurut skala berikut:

1 = STS = Sangat Tidak Setuju
2 = TS = Tidak Setuju
3 = KS = Kurang Setuju
4 = AS = Agak Setuju
5 = S = Setuju
6 = SS = Sangat Setuju

	STS	TS	KS	AS	S	SS
1. Saya merasa bahwa isi modul UT mudah dipahami	1	2	3	4	5	6
2. Saya merasa bahwa bahasa modul UT jelas dan mudah dimengerti	1	2	3	4	5	6
3. Saya puas dengan design dan bentuk modul UT	1	2	3	4	5	6
4. Menurut saya harga modul-modul UT cukup murah	1	2	3	4	5	6
5. Saya puas dengan pelayanan pendaftaran ujian dan pengumuman peserta ujian selama ini	1	2	3	4	5	6

	STS	TS	KS	AS	S	SS
6. Bagi saya soal-soal ujian UT tidak sukar	1	2	3	4	5	6
7. Saya puas dengan pelayanan panitia dan pengawas ujian selama ini	1	2	3	4	5	6
8. Saya puas dengan pengumuman dan pengiriman hasil ujian selama ini	1	2	3	4	5	6
9. Saya tidak mengalami kesulitan mendapatkan (membeli) formulir registrasi/pendaftaran ujian	1	2	3	4	5	6
10. Saya puas dengan pelayanan registrasi selama ini	1	2	3	4	5	6
11. Saya tidak mengalami kesulitan memperoleh (membeli) modul-modul yang saya butuhkan	1	2	3	4	5	6
12(a). Berapa kali Anda mengikuti tutorial intensif yang diselenggarakan oleh UPBJJ/UT Pusat tahun terakhir selama kuliah Anda di UT? a. Tidak pernah (jika tidak pernah teruskan ke no. 13) b. 4 kali atau kurang c. 5-8 kali d. 9-12 kali e. 13 kali atau lebih						
12(b). Saya merasa bahwa mengikuti tutorial intensif berpengaruh positif terhadap prestasi belajar saya	1	2	3	4	5	6
13. Saya merasa puas dengan sistem tutorial (tutorial intensif) yang diterapkan saat ini sebagai pengganti tutorial reguler.	1	2	3	4	5	6
14(a). Berapa kali Anda menghadiri tutorial intensif yang diselenggarakan oleh kelompok belajar Anda dalam tahun terakhir selama Anda kuliah di UT?						

		STS	TS	KS	AS	S	SS
	a. Tidak pernah (jika tidak pernah teruskan ke no. 15) b. 4 kali atau kurang c. 5-8 kali d. 9-12 kali e. 13 kali atau lebih						
14(b).	Saya merasa bahwa belajar bersama dengan teman-teman di kelompok belajar berpengaruh positif terhadap motivasi dan prestasi belajar saya	1	2	3	4	5	6
15(a).	Berapa kali Anda ikut serta dalam kegiatan sosial seperti olah raga, orientasi mahasiswa baru, penyuluhan masyarakat atau kegiatan lainnya yang diseleggarakan oleh UPBJJ dalam tahun terakhir selama Anda kuliah di UT? a. Tidak pernah (jika tidak pernah teruskan ke no. 16) b. 3 kali atau kurang c. 4-6 kali d. 7 kali atau lebih						
15(b).	Saya merasa bahwa berpartisipasi dalam kegiatan sosial di UPBJJ berpengaruh positif terhadap motivasi dan semangat belajar saya	1	2	3	4	5	6
16(a).	Berapa kali Anda mengadakan kontak dengan UPBJJ/UT Pusat (langsung maupun tidak langsung) untuk berkonsultasi dalam satu semester a. Tidak pernah (jika tidak pernah teruskan ke no. 17) b. 3 kali atau kurang c. 4-6 kali d. 7 kali atau lebih						
16(b)	Mengadakan kontak dengan UPBJJ/UT Pusat berpengaruh positif terhadap studi saya	1	2	3	4	5	6

	STS	TS	KS	AS	S	SS
17. Sejak mengikuti kuliah di UT, saya puas terhadap perkembangan intelektual saya	1	2	3	4	5	6
18. Saya telah membuat keputusan yang benar dengan memilih kuliah di UT	1	2	3	4	5	6
19. Saya merasa bahwa penting bagi saya lulus dari UT	1	2	3	4	5	6
20. Saya perkirakan akan mendapatkan pekerjaan atau posisi yang lebih baik apabila saya lulus dari UT	1	2	3	4	5	6
21. Nampaknya saya akan melakukan registrasi pada semester selanjutnya.	1	2	3	4	5	6
22. Saya senang memberitahu teman-teman di kantor atau di masyarakat untuk ikut kuliah di UT	1	2	3	4	5	6
23. Saya memiliki modul untuk setiap mata kuliah yang saya registrasikan	1	2	3	4	5	6
24. Saya selalu menyelesaikan dan menyerahkan tugas mandiri saya tepat pada waktunya	1	2	3	4	5	6
25. Saya bisa menyelesaikan membaca seluruh modul sebelum menempuh ujian akhir	1	2	3	4	5	6
26. Saya merasa percaya diri dan yakin sebelum dan selama mengikuti ujian semester	1	2	3	4	5	6

Bagian III

Jika Anda ingin menyampaikan saran, masukan ataupun komentar yang berkaitan dengan kuliah Anda di UT dalam tiga tahun terakhir ini, Anda bisa menuliskannya pada halaman kosong berikut atau di baliknya. Setelah selesai, lipat dan masukkan kuesioner ini ke dalam amplop kecil berperangko dan kirimkan ke kantor pos atau kotak surat terdekat.
Terima kasih atas kerjasama Anda!

VITA

Surname: Putra **Given Names:** Anak Agung Made Sastrawan

Place of Birth: Bangli **Date of Birth:** 4 July 1959

Educational Institutions Attended:

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Title of Thesis: Students Persistence at and Drop-out from Universitas Terbuka (The Open University of Indonesia).

Author 

ANAK AGUNG MADE SASTRAWAN PUTRA

May 3, 1993