

**THE EFFECT OF THE ETHIOPIAN SCHOOL LEAVING
CERTIFICATE EXAMINATION ON STUDENT ATTRITION RATE
IN WONDO GENET COLLEGE OF FORESTRY**

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students subject to academic dismissal of six batches (1988-1993 entrants), (b) get opinions through the use of a questionnaire on ESLCE administration and (c) examine the correlation of High school record, ESLCE GPA and Pre-college exam score with Freshman GPA. The findings of the study show that both withdrawals and academic dismissals constituted students who were incompetent for college education from the start. And moreover, most of the withdraws' decision to give up the programme untimely is a conscious act to escape from academic dismissal. The ESLCE (at least) entangled by administration problems is found very poor to serve the purpose vested in it. The pre-college examination ($r^2 = 0.82$) has proved to be the best predictor of First Year First Semester (college) performance. A combination of high school record and pre-college examination score yields a bit better prediction validity of the semester GPA ($R^2 = 0.83$) than the pre-college exam alone.

pre-college

high school

GPA

I. INTRODUCTION

Students recruitment was the authority of the College¹ for the first ten years of its establishment (1978-1986). At that time ESLCE GPA was not the only admission requirement. In addition to ESLCE GPA, candidates were selected based on entrance examination and High School achievements. During this period, the average attrition rate due to withdrawal and academic dismissal was 19.2% (for the sake of uniformity with the later changes on CGPA requirement for graduation, the rate of attrition is made to include graduates with CGPA less than 2.0).

However, from 1987 onwards, when the Higher Education Main Department started recruiting candidates using only ESLCE GPA, the attrition rate, due to the aforementioned reasons, increased sharply as shown in Table 1 (Source: office of the registrar WGCF).

¹ Wondo Genet College of Forestry is a lately (1993) transferred college from the Ministry of Natural Resources and Environmental Protection and Development to the Ministry of Education and is located around Shashemene, about 263 kms. South of Addis Ababa. It was established in January 1978 by the Ministry of Agriculture (the then mother institution of the college) with financial supports of the Swedish International Development Authority (SIDA).

As Table I reveals, attrition rate has steadily grown. The first year first semester and the total attrition rate of the 17th batch has shot up to 47.7% and 54.5% respectively. The average attrition rate of first year first semester of the 11th-17th batches (32.3%) accounted to 70.1% of their total average attrition rate (46.1%) . And this tells that most of the leavers discontinue their study in the first semester of the freshman year.

TABLE I

Attrition Rate in the College from 1987 -1993 Entering Batches*

Years	Batches	Attrition rate %	
		year I, semester I -	Total (in two years)
1987-89	11th	5.4(4)	28.4(21)
1988-90	12th	27.4(23)	40.4(36)
1989-91	13th	29.5(28)	44.8(43)
1990-92	14th	36.6(34)	54.1(53)
1991-93	15th	31.8(28)	45.2(42)
1992-94	16th	44.9 (35)	53.6 (45)
1993-95	17th	47.7(42)	54.5 (54)
Average		32.3	46.1

*Figures in parentheses are the number of students (leavers).

Such high and increasing rate of attrition is intolerable for a college that operates under limited budget and that should exercise **austerity** in its resource and time use. The problem is grave that requires **timely** solution. The adverse effect of the problem is not simply a misuse of

resources but it may also affect the standard of college education if at all the main factor of attrition is poor background of students.

Darge (1991) described the issue of ESLCE as a selection criterion for college admission is directly related to larger issues pertaining to quality of education, efficiency in man-power training and optimum use of available resources in higher education institutions of learning.

This paper is focused to re-evaluate the students and the selection instrument only on the assumption that the escalating attrition rate is generally the result of incompetence of candidates for College study. The background of the assumption lies behind the following facts:

- i) As first year instructors the investigator and his colleagues have observed the difficulty of many candidates to cope with College education.
- ii) Some studies suggest that attrition is associated to selection policy. Schools with unique reliance on entrance examination to pre-select students of higher academic calibre create low attrition rates (Studstill, 1986).

As one of practical measures to reduce wastage of education, the International Conference on Education at its Thirty Second Session (annexed in Brimel and Pauli, 1971) recommended the need for reviewing the selection procedures and methods used to test knowledge to the Ministries of Education of the different countries. It

further explained that arbitrariness and subjectivity in these matters should be eliminated as far as possible.

Fisseha (1991) remarked that ESLCE as the only selection criterion for Higher Education in Ethiopia is not in a position to select 50% of candidates for graduation. In general the studies seem to assert that the selection methods play a significant role in the decrease or increase of attrition rate.

iii) There seems to be a consensus among students, intellectuals and even the ESLCE office on abuse of ESLCE administration. The consensus is beyond hearsay. Getachew (1991) in his paper on "Important Issues Related to ESLCE and Suggested Solutions", noted that attempts to abuse the examination is becoming beyond control. He also noted that the attempts for abuse in some schools is found to be not only by students but also teachers, local officials, directors and even police men. Tirusew and others (1992) based on questionnaire survey administered to teachers, principals, Regional Education Office heads and college students came out with a conclusion that there are students who pass ESLCE by cheating. The study further discloses that the security of ESLCE has become questionable nowadays.

Objectives

The objectives of this study are to (i) identify major cause(s) of the high attrition rate of the college and (ii) propose appropriate

selection instrument(s) for admission to Wondo Genet College of Forestry.

II. LITERATURE REVIEW

Langmur (1971), in his paper on attrition and survival in the Freshman program of 1969/70 academic year, has dealt with the relation of ESLCE GPA and Freshman year academic status of the Arts, Library science and Physical Science students of Haile Selassie I University (HSIU). In the study, he has grouped the students on the basis of their ESLCE GPA and compared each group in relation to its probability of appearing in the list of good academic standing and success into sophomore year. The groups of ESLCE GPA were 3.0⁺ (n=128), 2.8 (n= 61), 2.6 (n=60) , 2.4 (n=76) , 2.2 (n=94) and 2.0 (n = 117). The study reported that the group with higher ESLCE GPA has higher probability to appear on the list of good academic standing students and be promoted into the sophomore year. Specifically it was found that 80% and 94% of the ESLCE GPA group with 3⁺(3-4) had appeared in the list of good academic standing and promoted to second year respectively. Similarly, the probability to be good academic performer and successful in the freshman year for the group with ESLCE GPA 2.0 was found to be 36% and 60% respectively. Generally ,the findings seem to indicate that the higher achievers of the ESLCE GPA do the same in the Freshman Year of the HSIU then.

Other studies of the relation of ESLCE GPA with the Freshman performance at HSIU (Tracy, 1965; King, 1969; and King and King, 1972) as cited in Bahalla and Belay (1991) have found the correlatio

coefficients to be 0.36 , 0.47 and 0.45 respectively. Tracy's (1965) and King's (1969) studies were based on Freshmen students CGPA while King and King's (1972) was on Freshman students First Semester GPA. The correlation coefficients found were significant and moderate, and hence these may indicate that the part played by ESLCE GPA in predicting the success of the Freshman university students was not negligible.

Melaku (1975) has investigated the same issue on 308 first year first semester dismissals and found that the correlation coefficient between ESLCE GPA and university freshman performance was 0.10, which is poor relation as compared to the findings of the aforementioned studies.

As cited in the work of Tassew and others (1990) early works on ESLCE, Korten (1964), Kehoe (1964) and Javis (1969) remarked that ESLCE is weak for selection purpose.

An important research was carried out by Tassew and others (1990) on "Assessment of the degree of correlation between the ESLCE results and four years' secondary school and university academic performance" based on 994 randomly selected Addis Ababa University (AAU) students in the years 1979, 1980,1981, 1982 and 1983. Even though this is a research of recent year, the subjects considered were ESLCE examinees of ten or more years ago. And the findings of the study may indicate the status of ESLCE of that time. Some of the results of the study were as follows:

- i) The higher the year of the secondary school, the better is the association of the students' performance with their ESLCE GPA as compared to its lower year. The correlation coefficients of the ESLCE GPA with the four years (9-12) of Secondary School performance were 0.18, 0.28, 0.34 and 0.44 starting from grade nine through twelve.
- ii) The correlation coefficient of ESLCE with AAU First Year performance appeared to be 0.43 which almost showed the same association with Grade Twelve performance ($r = 0.44$).
- iii) Students of lower ESLCE GPA seem to do the same in Freshman year. And the probability of dropouts in the freshman year was found high in the lower ESLCE GPA achievers with 60.5% for those who earned 2 and 2.2 GPA.

In general the findings of Tassew and others (1991) partly indicate that ESLCE at that time (10-14 years ago) was moderately associated with First Year university performance. Besides, the fact that the large portion of Freshman drop outs were from low achievers of ESLCE GPA seem to verify their significant association.

Asmerom Kidane and others (1989), on a large survey study in different colleges within and outside Addis Ababa University concluded that good achievers of ESLCE seem to do the same in their first semester college examination even though it was observed that a considerable number of students with very high ESLCE GPA's (3.0 - 4.0) were also dismissed.

One who differently argued than many of the researchers do at the time or late this time in favour of the existence of strong linear relationship of a transformed ESLCE GPA with identical transform of First Semester university performance was Habte (1988). His finding was based on 150 Freshmen students of the 1987 entrants of the Faculty of Science at Addis Ababa University .

Mekonnen and others (1991) made a comprehensive study on predictive power of ESLCE as compared to other instruments including high school performance and locally prepared aptitude test. The subjects of the study were 1720 regular First Year students enrolled in 1990/91 in the College of Social Sciences and Faculty of Science of Addis Ababa University. In the study, the subjects were grouped into Addis Ababa (n=110) and non- Addis Ababa (n=503). An investigation on both groups indicated that locally prepared aptitude test had better predictive power of Freshman Cumulative Grade Point Average. The correlation coefficient was found to be 0.62 for the Addis Ababa group and 0.58 for the other one. In the non-Addis Ababa group the correlation coefficient of ESLCE GPA with Freshman GPA was 0.22 while that of Addis Ababa was 0.39. The association of grade twelve reported results with Freshman CGPA was greater (0.42) in the non-Addis Ababa and a bit lower (0.3) in the Addis Ababa group, than with that of the ESLCE GPA. The team concluded that aptitude score could be a useful criterion in predicting freshman university performance. However, they put a remark that the correlation of ESLCE GPA with freshman GPA has a

decreasing tendency than what has been expected due to the limited range of the ESLCE GPA of college candidates.

Research works by Semira (1991) and Wolde Amanuel (1991) came out with the same finding. They reported that there was no significant relation of ESLCE GPA with college performance. Both investigators have also indicated that the attrition rate is not related to the mode of admission (Regular, Quota and National Military service). This may imply that nowadays attrition has no firm relation with size of ESLCE GPA, which contradicts Langmur (1971) and Tassew and others (1990) who found higher probability of drop outs in low achievers of ESLCE GPA .

From the very brief literature review of the research findings dealing with the ESLCE, it can be noticed in general terms that most of the earlier works support ESLCE as selection instrument while the later works report as poor mechanism. This disagreement of findings between earlier and later research works seem to show the diminishing predictive power of ESLCE GPA with time.

III. METHODS

SUBJECTS AND MATERIALS:

The subjects of the study include 166 First Year First Semester students of Wondo Genet College of Forestry (WGCF) in the 1992/93 and 1993/94 academic years, and 220 First Year First Semester withdrawals and students subject to dismissal (for the first

four batches, includes survivors of re-examination in order to keep uniformity with the discontinuation of the privilege of re-examination from the College) of WGCF of the 1988 - 1993 entrants.

The study of the 220 First Year First Semester leavers is to observe the relationship between the rate of withdrawals and those of subject to dismissal in First Year First Semester of each batch.

Even though the size of observations is found to be varied from one analysis to another depending on the type of analysis and availability of data, the First Year First Semester candidates of 1992/93 and 1993/94 academic years are grouped on the basis of their first year first semester academic status into withdrawals, academic dismissals, withdrawals plus the academic dismissals and survivors (those who are promoted to the second semester) .The past academic background of each group is evaluated and compared in the light of their high school performance, ESLCE GPA and achievement of an examination administered by the college right after registration (hereafter pre - college examination). In evaluating the academic background of the different groups of students the high school score considered from grades 11 and 12 , the ESLCE and the pre-college examination are computed from English, Mathematics, Chemistry and Biology subjects only. Moreover, the study covers a questionnaire on ESLCE administration administered to 91 First Year Second Semester and Second Year First Semester students of the 1993/94 academic year at WGCF.

The methods of analysis used in the study are descriptive, t-test, correlation and regression analysis.

PROCEDURES USED TO SET AND ADMINISTER THE PRE-COLLEGE EXAMINATION:

In addition to the Higher Education Main Department criterion for admission to higher learning institutions (ESLCE), candidates of WGCF are required to be students of Biology and Chemistry. For this reason the examination was made in the compulsory subjects (English and Mathematics), Biology and Chemistry. The examination was an objective type prepared by senior grade 12 teachers (B.Sc./B.A.) at Shashemene Comprehensive Secondary School based on guide-lines given in writing by the researcher (see Appendix 1). The examination items prepared by the high school teachers were evaluated, revised and modified in the light of the guide-lines of the researcher by concerned instructors of the Basic Science Department of WGCF. Even though the high school teachers prepare fifty examination items for each subject the college finally set twenty five in English and thirty in the others each. The examination was designed to be much easier than ESLCE and its simplicity for college candidates was verified by at least five senior and experienced grade 12 teachers of different secondary schools at Addis Ababa in each subject area (see Appendix 2 & 3). In general, most of the items were prepared in such a way that students who passed ESLCE could do them with little or no difficulty. The pre-college exam is administered for the 1992/93 and 1993/94 Freshmen students of the college. The examination was held right after registration. During the examination

period no two or more students were allowed to share a common table and careful proctoring was carried out to eliminate cheating.

IV. RESULTS AND DISCUSSION

1. A COMPARISON OF MEAN ACHIEVEMENTS IN ESLCE, HIGH SCHOOL AND PRE-COLLÈGE EXAMINATION

In the following analysis 166 freshmen students of the 1992/93 and 1993/94 academic years of WGCF are grouped into withdrawals, academic dismissals, withdrawals plus academic dismissals and survivors (groups, hereafter), based on their first year first semester academic status and their mean achievements in ESLCE, High School and Pre-college examination are compared .

1.1. DESCRIPTIVE ANALYSIS

a) ESLCE Mean GPAs of the Groups

Even though the ESLCE GPA used in this study is computed from four ESLCE subjects (English, Mathematics, Chemistry, and Biology)

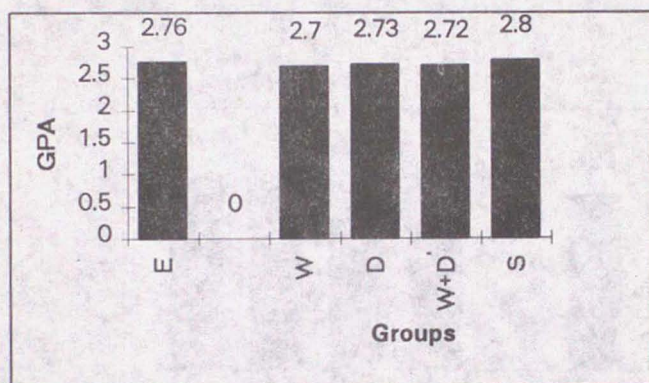


Figure 1. ESLCE mean GPAs of the entrants and the groups
(The numbers on the bar graphs are mean GPAs of the groups)

E = Entrants (enrolled students) W = Withdrawals D = Academic Dismissals W+D = Withdrawals plus Academic Dismissals S = Survivors

significant variation between the ESLCE mean GPAs of the groups is not seen (see Figure 1) since the required ESLCE GPA for admission of almost all candidates of the college in both 1992/93 and 1993/94 academic years were the same (3.0). The same and high ESLCE GPA

achievement of all candidates show that they were equally competent for college education.

b) High School Mean Achievements Of The Groups

From Figure 2, it appears that the high school mean achievements of both withdrawals (58.4%) and academic dismissals (57.6%) are the same and they are academically weak as compared to the survivors (74%).

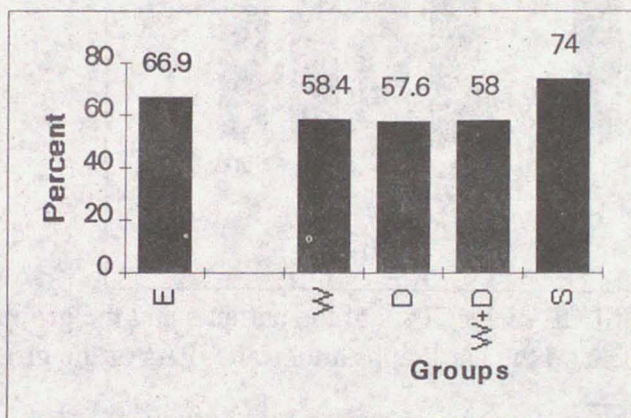


Figure 2. High School mean scores of the entrants and the groups.

And this remark contradicts the conclusion reached from Figure 1; that the candidates are equally competent for college education.

c) Pre-College Exam Mean Scores of the Groups

From Figure 3, the following remarks can be made:

- i) In spite of the Pre-College exam being easier than ESLCE as verified by senior and experienced grade 12 teachers (see appendix 2), the mean score of the candidates in the exam (49.5%) is very low and many of the candidates failed to achieve the pass mark (50%). In fact, the mark list shows that 52.3% (85) of the candidates failed to get the mark 50%. On the other hand it was found that 80% of the said failures withdrew or were academically dismissed in the First Year First Semester of the programme and

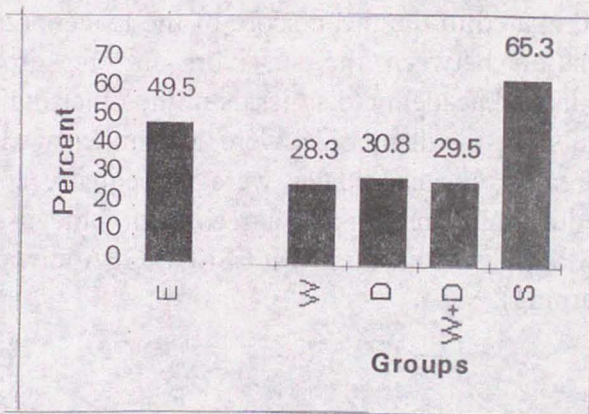


Figure 3. Pre-college exam mean scores of the entrants and groups.

the rest 20% survived with a minimum requirement (9.4% academic warning) which implies that the pre-college exam is a better selection instrument than ESLCE. This promising result of the pre-college exam as a predictor of First Year First Semester

success may not be due to its high standard or quality but probably due to the effective control of the factors that lead to examination administration abuses.

- ii) The fact that the mean score of the withdrawals (28.3%) is not better than the academic dismissals (30.8%), as it is also shown in Figure 2, reveals that the reason for high number of withdrawals in the first year first semester of the program may be an academic deficiency. The withdrawals are those who are not able to cope with college education.
- iii) The pre-college exam mean score of the survivors (65.3%) is very high as compared to the mean score of the leavers (29.54%). The high variation between the survivors in one group and the withdrawals and academic dismissals in the other indicate that the withdrawals and the dismissals were academically weak from the start. Moreover, the candidates were not equally competent for college education, and this disagrees with the assumption of ESLCE GPA (best achievers with ESLCE GPA are competent for higher learning).

1.2. t-test Analysis

The t-test analysis in the ensuing Table II compares the mean achievements of the First Year First Semester withdrawals (W) and academic dismissals (D) in ESLCE, high school and pre-college exam.

TABLE II

t- test (Large Samples)

	W	D	df	SE. diff	t	t-critical
ESLCE	2.70	2.73	72	0.077	0.390	1.993
High school	58.37	57.6	71	1.690	0.456	1.9935
Pre-College	28.3	30.8	70	2.250	1.110	1.994

The t-test analysis in Table II shows not significant difference between mean achievements of the withdrawals and academic dismissals in ESLCE, high school performance and pre-college exam at 5% level. This seems to show that the withdrawals and the academic dismissals in the first year first semester of the program were of similar academic background which is in agreement with the facts observed in Figure 2 and Figure 3.

The t-test analysis in Table III compares the mean achievements of the first year first semester leavers (W+D) and survivors (S) in ESLCE, High School and Pre-College examination.

In Table III, two contradicting ideas are clearly observed: i) The difference between the ESLCE mean GPAs of the leavers and survivors is found to be not significant at 5% level. This implies that the candidates of the college were academically competent and of homogenous academic background. ii) The difference of the mean performances of the groups in both high school and pre-college examination are found to be significant at 1% level, which contradicts

TABLE III

t-test (Large Samples)

	W+D	S	df	SE.diff	t	t-critical
ESLCE GPA	2.72	2.8	161	0.04	1.89	1.96
High School	57.96	73.95	159	1.39	11.51**	2.576
Pre-college exam	29.54	65.3	156	1.98	18.06**	2.576

** Significant at 1% level

the academic homogeneity and competency of all college candidates as presumed by ESLCE GPA. This agrees with the conclusion reached from Figure 2 and Figure 3. That is both withdrawals and dismissed students (as one group) are academically weaker than the

survivors from the outset as evaluated from their High School performance and pre-college examination.

Thus the t-test analysis indicates that;

- a) candidates of the college were not in the same level of academic capability, even though assumed by the ESLCE GPA.
- b) in general both withdrawals and the academic dismissals of the first year first semester were academically weak from the outset and neither of them were competent for college education. Therefore, ESLCE seems not to be a reliable mechanism for selecting capable students for college education.

2. RELATION OF FIRST YEAR FIRST SEMESTER WITHDRAWALS AND STUDENTS SUBJECT TO DISMISSAL

In this analysis the relation of the rates of First Year First Semester withdrawals and students subject to dismissal of the 1988-1993 entries of WGCF are considered.

An investigation into the Freshman First Semester attrition data of the 1988 - 93, as shown in Fig 5, indicate a negative relation between the number of withdrawals and those of subject to academic dismissal of each batch. An increase of withdrawals create a decrease of students subject to academic dismissal or vice versa. The existence of such inverse relation between the said groups may imply that if the withdrawals had been decided otherwise (not to withdraw) their

probability to be academically dismissed was high. Thus the decision of most of them to withdraw ahead of the end of the semester seem to be a conscious act to escape from academic dismissal and to exploit other advantages. This result supports the conclusions reached from Figure 2, Figure 3, Table II and Table III.

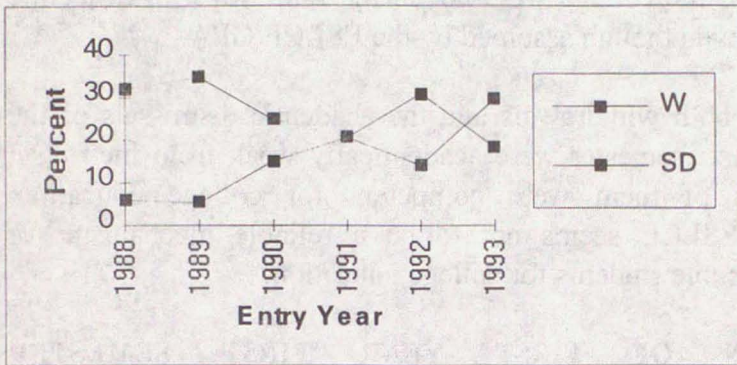


Figure 5. An Increase of Withdrawals (W) Create a Decrease of Students Subject to Academic Dismissal (SD) or Vice Versa.

As shown in the correlation matrix (Table IV) neither the grades of ESLCE subjects nor their GPA are expected to have significant relation with high school performance, pre college exam and semester GPA (partly) due to the effect of limited range of the ESLCE grades and GPAs. But the correlation coefficients of pre-college examination average scores, high school average scores of the four subjects (Mathematics, English, Biology and Chemistry) and high school average scores of all subjects with first semester GPA are turned out to be 0.904, 0.780 and 0.740 respectively, which are all significant.

Even though the limited range of ESLCE GPA has a negative effect on correlation coefficient earlier analyses have shown no supporting

Correlation Analysis

TABLE IV

A Correlation Matrix (Including ESLCE Subjects, ESLCE GPA, High School Scores, Pre-College Exam and First Semester GPA)*

	1	2	3	4	5	6	7	8	9
Maths (1)	1								
Eng.(2)	-0.16	1							
Biol.(3)	-0.07	-0.31	1						
Chem (4)	0.07	-0.17	-0.12	1					
ESLCE GPA (5)	0.39	0.31	0.11	.69	1				
High School (6)	-0.01	0.14	0.07	.08	0.20	1			
Pre-College Exam (7)	-0.04	0.01	0.04	0.09	0.16	0.97	1		
First Semester GPA (8)	0.06	0.21	0.11	0.03	0.25	0.77	0.72	1	
	0.03	0.15	0.06	0.05	0.19	0.78	0.74	0.904	1

* first year first semester examinees of the 1992/93 and 1993/94 academic years.

2, 3 & 4 refer to ESLCE grades of Mathematics, English, Biology and Chemistry, 5 = ESLCE GPA of the four subjects (Maths, Eng., Biol. and Chem.), 6 = High School average score of the four subjects, 7 = High School average score of all subjects, 8 = Pre-College exam average score
9 = First semester GPA

evidence to ESLCE GPA as a selection criterion to higher learning institutions.

The analyses, so far revealed that the pre-college examination is a best predictor for freshmen students success followed

3. RESPONSES TO QUESTIONNAIRE ON ESLCE ADMINISTRATION.

TABLE V.

Response of WGCf Students to Some Questions on ESLCE Administration*

No	Items	Yes %	No %	Not sure %	N.R %
1	Is there adequate space to let examinees sit sparsely (apart) for the ESLCE in your school or locality ?	61.5	37.4	-	1
2	Have you ever heard or seen irresponsible invigilators who offer assistance to examinees?	52.7	46.2	-	1
3	Do you think that there are students who pass ESLCE by cheating ?	82.4	14.3	-	3.3
4	Do you think that the students who pass ESLCE by cheating (or with others help) are many in number?	36.3	15.4	39.6	8.7
5	Do you think ESLCE should continue to work, as it is now, as the only admission criterion to Higher Education?	22	71.4	-	6.6
6	Write any comments you have regarding the administration problems of ESLCE. You may use English or Amharic language.				

*N.R = no response

by high school performance. A regression analysis has shown that a combination of high school record and pre-college exam score yields a bit better prediction validity of the semester GPA ($R^2 = 0.83$) than

the pre- college exam alone ($r^2 = 0.82$). The inclusion of the ESLCE GPA as a third explanatory variable in the said combination resulted in no change of the prediction validity of the semester GPA.

In the study a questionnaire on ESLCE administration is administered to 91 first year second semester and second year first semester students of WGCF of the 1993/94 academic year.

Higher proportion of respondents (61.5%) believe that space is not significant problem for ESLCE administration. About 52.7% of the respondents agree that invigilators offer assistance to examinees. The fact that 82.4% of the respondents believe that there are students who pass ESLCE by cheating and 71.4% agree that ESLCE should not continue to work, as it is now, as the only admission criterion to higher Education reveal that the objective of ESLCE is endangered and may not serve the purpose vested in it at the existing testing condition.

The affirmative response to items 1, 2 and 3 confirm the findings of Tirusew and others (1992) on the same items. In the study of Tirusew and others (1992) the affirmative (yes) respond of the students to items 1, 2 and 3 were found to be 71.3%, 49.5% (48.18% No) and 82.27% respectively. Most of the responses to the open ended items reflect the existence of a problem with regard to administering the ESLCE. Some students point out that the abuse of ESLCE administration is more than mere cheating. They further noted that there are cases where individuals take the examination for other candidates.

The solutions pointed by the respondents to the problems include: not to select local invigilators, assigning dedicated invigilators, strict and tough measures against any type of abuse of ESLCE administration, separated examination places for clever and weak examinees based on high school record, use of subjective type questions, use of entrance examination, inclusion of high school record as admission requirement etc.

V. CONCLUSIONS

- a) ESLCE has an administration problem and consistent efforts should be made to improve it.
- b) Almost all of the withdraws of the first year first semester students of WGCF are the academically weak students who do not wish to see the fate of academic dismissal. Thus neither the withdrawals nor the academic dismissals were competent for college education from the out set.
- c) The incompetence of many candidates for College education and the poor predicting power of ESLCE about freshman GPA reveal that ESLCE is not in a position to select capable students for higher education. And hence the cause for high attrition in WGCF lies in the exclusive use of ESLCE as the only admission requirement which entangled itself (at least) in administration problems. Moreover, the strict supervision of students independent work in the college, which may not

allow weak students to survive is a contributing factor for high attrition. And this system should be encouraged consistently in order to keep the quality of education in the college .

d)The pre-college examination ($r^2 = 0.82$) has proved to be the best predictor of first year first semester college performance followed by high school achievement considered from grades 11 and 12.

e) Not less than 50% of the 1992/93 and 1993/94 academic year candidates of Wondo Genet College of Forestry were unfit for college education.

VI. RECOMMENDATION

Failure of selection instrument to recruit students capable for College education inevitably results in wastage of education and/or deteriorating standard of graduates. With large proportion of incompetent entrants it is difficult to weed out all weak students from the programme. The relatively better but generally weak students could have the chance to graduate and assume responsibility which they can not actually do it as required . On the other hand Colleges could have many competent candidates from the large number of examinees if they use appropriate admission policy.

The problem seems that we are not flexible to decide and set proper selection methods that could enable us to use our resources efficiently

for the good of the country despite of the adverse effects of the currently used inefficient selection instrument. There is nothing better that could warn us about the weakness of the ESLCE as the only selection instrument than the high increase rate of attrition. It is surprising to note that about half (47.7%) of the 1993/94 entrants of WGCf discontinue the programme right in the First Semester of the Freshman Year.

The effects of the weak selection instrument are also reflected in the daily teaching learning process in the following forms.

- i) With large number of weak students in a college class, it is difficult to teach a course in its required depth and coverage. Because the students participation is lower than expected and many show difficulty to grasp the subject matter. This may also result in discouraging the lecturers to show the required effort and consequently leads to the deterioration of the academic standards.
- ii) Most weak students seem to know ahead that their fate is academic dismissal but they do not accept it and never hesitate to disturb the teaching learning process as a revenge against the coming decision of the College to dismiss them. Some times the cost of the consequences could be high, and may lead to leniency of lecturers in their evaluation system.

In general the negative effect of the poor selection mechanism is becoming graver and graver than ever and should be given the required attention. Thus in order to i) create a conducive

environment for teaching learning process ii) keep quality of education and .iii) secure optimum use of available resources, concerned bodies have to seek a way for considering a combination of an entrance examination (pre-college examination) and high school performance as supplementary screening instruments to the ESLCE. This second phase of screening could be managed by individual colleges on the bases of national guidelines.

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Appendix 1

Guide-lines used to select exam setters and to draw up examination questions

a) General guide-lines given to the Director of the high school to select exam setters .

1. Objective of the Pre-college examination:
 - For research purpose
2. Parts of the pre-college examination:
 - Mathematics, English ,Biology and Chemistry
3. Type and number of Questions:
 - Multiple choice questions, fifty from each subject.
4. Selection criterion for exam setters .
 - B.Sc.(B.A.) holder (or above) in the subject.
 - A minimum of three years teaching experience in grade twelve.
 - Teaching performance evaluation for the last two years must be 3 or above .
 - Priority shall be given to those who taught different grades (grades 9, 10,11, and 12).

b). Directions given for examination setters.

- 1) Use simple and clear language.
- 2) Set general questions from grades 9, 10, 11 and 12 proportionally.

- 3) Avoid questions that test memorisation.
- 4) Make sure that the difficulty level of the questions shall be easier than the ESLCE .
- 5) Prepare your examination on the assumption that if it is given to randomly selected grade twelve class, 20% of the students shall earn a mark of 75% or above.
- 6) Use your own creative questions.
- 7) Show the draft questions to your colleagues and be ready to accept constructive comments.
- 8) Circle the letter of the choice that contains the correct answer.
- 9) Submit your assignment within a week to your Director

Appendix 2

Senior high school teachers response on questionnaire related to the standard of the pre-college examination*.

	Questions	English(n=5)			Mathematics (n=6)			Chemistry (n = 6)			Biology (n=5)		
		Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
1	Do you think the items are all made from high school syllabus?	5	-	-	6	-	-	6	-	-	5	-	-
2	Do you think most of the items require memorisation of facts or formulas to answer them?	2	3	-	-	6	-	1	5	-	1	3	1

continued

	Questions	English(n=5)			Mathematics (n=6)			Chemistry (n = 6)			Biology (n=5)		
		Y	N	NR	Y	N	NR	Y	N	NR	Y	N	NR
3	Are most of the items asking general knowledge of the subject?	3	1	1	6	-	-	4	1	1	4	-	1
4	The items are administered (given) to freshmen students who join a diploma programme right after registration. The ESLCE GPA of the students were 2.8 & 3. Do you think they are difficult items for such level of students?	1	4	-	-	6	-	-	5	1	1	4	-
5	Are the items easier than those in the Ethiopian School Leaving Certificate examination?	3	2	-	6	-	-	4	2	-	4	1	-
6	Do you think the construction of the items is understandable?	5	-	-	6	-	-	6	-	-	5	-	-

* Y = Yes , N = No , NR = No response

Appendix 3.

Profile of the respondents of the questionnaire on the standard of pre-college examination (appendix 2) and their additional comments.

	Profile	Comments
1	Tesfaye Mengesha, B.A. (English) Service years as grade 12 instructor: 8 Total years of service : 26	- It has relevance to their field of study - Grammar questions are a bit easier for students to answer. - Number of questions must not be less than fifty so that the paper covers most topics of the high school syllabus.
2	Melkamu Tessema, B.A. (English) Service years as grade 12 instructor: 5 Total years of service: 5	
3	Dawit worku, B.A. (English) + M.A. student ; Service years as grade 12 instructor :16 Total years of service :16	- Items are much easier than that of the ESLCE . - The communicatiye aspect of the language has to be given due respect.
4	Belayneh Kassaye, B.A. (English) Service years as grade 12 instructor: 21 ;Total years of service : 21	

5.	Lulseged , B.A. (English) Service years as grade 12 instructor: 4 Total years of service: 27.	-Items are quite remarkable. -Grammar usage is not found balanced.
6.	Ignatius, M.Sc.(Chemistry) & B.Ed. Service years as grade 12 instructor: 23 ; Total years of service: 25	
7	ViC. Ommen B.Sc. (Chemistry) Service years as grade 12 instructor: 22 ; Total years of service : 25	Questions are of standard nature and are often asked by us in our progress test. It covers all the important topics from 9 - 12. I very much appreciate the language and the nature of questions. It definitely evaluate all the faculty of the students .
8	Seifu Abebe, M.Sc. (Chemistry) Years of service as grade 12 instructor : 9 ; Total years of service : 14	Questions are easily understandable, and are all short questions. The questions can also be answered by an average student.
9	Mrs. I. Rajan, M.Sc. (Biochemistry) Total years of service : 12	Though the items appear to be easy, the students may get 50-60%.
10	Abate Shenkutie , B.Sc. (Chemistry) Service years as grade 12 instructor : 7 Total years of service : 12	-The questions does not need much memory .They are easier questions as compared to the syllabus of the high school, and more over it does not contain all the topics.
11	Demissie Tirfie , B.Sc. (Chemistry) Service years as grade 12 instructor: 14 ; Total years of service : 14	-The questions are relevant to grade 12 students. -The whole chapters are not covered. -There must be questions from all the chapters proportionally.
12	Assegid Atnafu, M.Sc. (Math) service years as grade 12 instructor :	

	<u>16</u> ; Total years of service: <u>21</u>	
13	N.Mathaligan B.Sc. (Math) Service years as grade 12 instructor : <u>16</u> ; Total years of service : <u>14</u>	
14	Teshome Wori, B.Sc. (Math) Service years as grade 12 instructor : <u>18</u> ; Total years service: <u>20</u>	Most of the questions are of high school level . Standard of questions should be raised.
15	Alemu Teklewold , B.Sc. (Math) ; Service years as grade 12 instructor: <u>6</u> Total years of service : <u>22</u>	-Questions are set from high school syllabus but lacks complete coverage of the syllabus. Increase number of questions to increase the coverage.
16	Melese Workneh, B.Sc. (Maths) Service years as grade 12 instructor : <u>13</u> ; Total years of service ; <u>13</u>	The questions are very easy. If the candidates with that ESLCE GPA fail to do this exam it could only mean that they have copied all their way in the high school. I believe the teachers, the syllabus, the ESLCE and the way ESLCE is administered should be re-evaluated.
17	Bishaw Tiruneh, B.Sc. (Maths) Service years as grade 12 instructor: <u>13</u> Total years of service : <u>16</u>	
18	Adem Shifaw B.Sc. (Biology) Service years as grade 12 instructor : <u>15</u> ; Total years of service : <u>15</u>	-Most of the questions are copied from previous ESLCE and do not cover the entire 17 units of high school syllabus. Design in a better way.
19	Berhanu G/hiwot, B.Sc. (Biology) Service years as grade 12 instructor: <u>10</u> ; Total years of service : <u>14</u>	

20	Asnake Mammo, B.Sc. (Biology) Service years as grade 12 instructor: 8 Total years of service : <u>10</u>	
21	Lealem Fikru, M.Sc. (Biology) Service years as grade 12 instructor : <u>10</u> ; Total years of service : <u>14</u>	Include questions based on experimental works.
22	Yosef Zebene, B.Sc. (Biology) Total years of service : <u>14</u>	

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