Preparations and Performances of Prospective Graduates' Students on the National Exit Exam: A Case of Hope Enterprises University College.

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Abstract

This study investigated the preparedness and performance of HEUC prospective graduates on the National Exit Exam. The study was conducted with randomly selected 204 students through cluster sampling and survey data, and qualitative opinions were collected from 162 respondents (80%). In addition, open-ended questions were given to ten lecturers on the subject matter. In addition, 2023 prospective graduates' 425 CGPA and the results of their exit exams were compared. Employing a mixed-methods approach, the research analyzed student perceptions of tutorial services using an international problem-based learning instrument and compared HEUC student achievements on the exit exam to their CGPA. Key findings include a positive correlation between CGPA and exit exam performance, suggesting that tutorial services and model exams contribute to success. However, gender was found to have no significant impact on exit exam results. Qualitative data revealed that students generally rated tutorial services and model exams more positively than the national exam, although limitations in data availability prevented a more in-depth analysis. Based on these findings, the study recommends that HEUC continue offering tutorial services and model exams to enhance student preparation for the National Exit Exam. Future research should explore additional factors influencing exit exam performance and consider expanding data access for more comprehensive analysis.

***Keywords**: Problem-based tutorial, CGPA, National Exit Exam, Model exam.*

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1. Background

The establishment of Hope University College (HEUC) within Hope Enterprises marked a milestone in Ethiopia's higher education landscape. What began as an initiative by the founding president has blossomed into a reputable institution offering a diverse range of programs, comprising ten regular programs, including both undergraduate and graduate offerings. However, despite this progress, the pursuit of educational quality faces multifaceted challenges in Ethiopia's higher education system.

The University College has three faculty members and two schools. The business faculty has three undergraduate programs: the Department of Accounting and Finance, the Department of Management, and the Department of Marketing Management. The Faculty of Informatics runs the the Department of Information Technology the Department of Information Systems and Computer Science. The School of Architecture runs a five-year undergraduate architecture program. The Graduate School has three programs: Master of Business Administration, Master of Organizational Leadership, and Master of Accounting and Finance. As part of enhancing the quality of education, HEUC graduates took the national exit exam administered in the country for the first time in 2023.

1.1 The Quality in Higher Education

As part of a major concern globally, several efforts in multiple directions have been made by administrators and academicians to induce quality components in the teaching-learning situation (Zaki and Rashidi, 2013). An effective and efficient higher education system is vital for sustainable economic development in developing countries such as Ethiopia. Such a system, among others, improves the education and training of future employees, harnesses future leaders, fosters an enabling learning environment, and enriches the academic and intellectual landscapes. The focus on higher education in developing nations such as Ethiopia can bear fruit if education is delivered by emphasizing quality over quantity in the delivery of education with long-term perspectives (World Bank, 2009).

The quality of higher education in Ethiopia is facing several challenges. These challenges include inadequate competence of incoming students, low quality of general education, the inefficiency of leadership, unsatisfactory teaching and learning practices, inadequate qualification and competence of instructors, and inadequacy of teaching facilities and resources (Mulugeta, et.al,

2023). Moreover, issues such as poor infrastructure, lack of policies to regulate education quality, staff resistance, low staff motivation, low enrollment, and inappropriate budget allocation further hinder the development of the education sector (Baiysa, et al, 2015 and Tebeje, 2018). The rapid growth in the number of institutions and the lack of basic entrance qualifications also contribute to the declining quality of education in Ethiopia (Beyene et.al, 2022). Furthermore, there is a gap between policy and practice, with deficits in accountability, commitment, and educational processes, as well as a failure to engage students in rigorous and relevant learning experiences (Tadesse, T., 2018). To overcome these challenges and improve educational quality, there is a need for innovative teaching mechanisms, unique regulatory bodies, and effective quality management models among others (Bizayene, M., 2019).

In the past decades, the widespread growth of higher education, aimed at maintaining educational standards, encountered its own set of challenges. In Ethiopia, the rapid expansion of higher education has been accompanied by a decline in its quality in many respects, creating what has been termed a "vicious circle" (Woldegiyorgis, 2017). This expansion primarily responded to public demand, aimed at fostering social inclusion and alleviating poverty. However, it has struggled to find equilibrium by simultaneously enhancing quality with the same magnitude (Semela, 2011). Similar challenges have been observed in Brazil, an increase in the number of medical schools has led to a decrease in the quality of education and poorly prepared medical graduates (Alice et al., 2014).

The issue of quality is private educational institutions confront hurdles related to governance, funding, and infrastructure, all of which significantly affect the quality of education they offer (Yirdaw, 2016). Similarly, government-run institutions grapple with issues spanning teaching methodologies, guidance and counseling services, faculty qualifications, and limitations in research capabilities—each of these factors contributes to the paradoxical challenge of maintaining high educational quality (Desta, 2004). The expansion of higher education in Ethiopia has been accompanied by a range of challenges, including underfunding, staff shortages, and outdated curricula (Tessema and Abebe 2011; Bishaw and Melese, 2017).

In the higher-education landscape, quality assessment has been under constant pressure, mainly due to a paradoxical tension that appears between internally driven quality improvement efforts

and practices and external quality assurance agencies' calls for accountability (William, 2015). The underlying reason for this tension lies in the discrepancy between the intrinsic and extrinsic motivations that encourage engagement in quality assessment (Borden, 2010). However, commitment to practicality may trigger quality improvements (Sánchez-Carracedo,2021, King, 1978), and extrinsic motivations, such as fitting with external quality requirements or securing funds, drive accountability (Borden, 2010, Harvey, 2005).

Improving the quality of education requires a holistic, long-term strategic plan. The implementation of exit exams in Ethiopian higher education institutions aims to ensure that graduates have the necessary competencies for the labor market and improve the quality of education (Abebaw, 2015). In addition, the implementation of quality assurance guidelines in public universities in Ethiopia is lacking in areas such as the quality of academic staff, teaching and learning, infrastructure, and resource management (Misgina, 2013 and Desta, 2004). These issues contribute to the overall quality of education in Ethiopia, which is further affected by factors such as large class sizes, difficulties in implementing continuous assessment, and low student performance and readiness (Birhan, 2018, Gebremedhin and Fenta., 2015). To address these challenges, recommendations include training more qualified lecturers, improving teaching and assessment methods, and maximizing the utilization of available resources (Gelato, 2020).

So, the literature underlines, multiprong interventions to improve the quality of education as the challenges are complex and no one measure can tackle the whole range of issues that have been declining the systems of quality in higher education in Ethiopia. At the theoretical level, quality-oriented education and examination-oriented education are not opposing concepts, but rather different categories that can coexist (Ding, 2001). There is a need to apply both approaches to enhance quality in higher education.

1.2 Academic Performance Metrics and Indicators in Ethiopian Higher Education

The systemic failure of higher education to maintain quality led a regulatory body to introduce a qualifying national exit exam in undergraduate studies. This expansion has been driven by the government's desire to boost economic growth and reduce poverty, but it has also placed significant pressure on the quality and autonomy of universities (Akalu, 2014). The introduction of national exit exams in this context is likely to exacerbate these challenges, as it may further strain resources and potentially compromise the quality of education. Therefore, while the exams

may serve as a useful tool for assessing student learning, they also need to be carefully implemented to ensure that they do not undermine the broader goals of higher education in Ethiopia (IBID). Regarding national exit exams, there are concerns regarding the scheme, including the cost of maintenance, potential weaknesses in the education system, and exam administration and management (Eyob et al. 2022). Similar challenges were reported in the law exit exam, such as financial constraints and adjusting the academic calendar to provide a space for preparations and review of the exam (Regassa, 2010).

A range of factors have been identified as influencing academic performance in Ethiopian higher education. Tadesse (2018) emphasizes the need for a more comprehensive approach to quality assessment, including formative assessment and internal systems. Gurmessa and Bayisa (2015) highlights the lack of a clear link between pay and performance, leading to low motivation and engagement among faculty members. King (1971) identifies proficiency in English as a key predictor of university grades, while Mohd (2016) underscores the importance of university entrance exam scores, family economic situation, sleep time, and study habits in determining academic performance. These findings suggest a need for a more holistic approach to performance assessment and support in Ethiopian higher education.

Evaluations of the law exit exam revealed significant positive correlations between entrance exams, cumulative grade-point averages (CGPAs), and exit exam results. However, critical issues have emerged, such as ambiguous standards and fluctuating pass thresholds (Seid M et al., 2018). The incongruence between exit exam guidelines and actual practice raises valid concerns. The evaluation even questioned the necessity of making the law exit exam a prerequisite for graduation given that employers tend to value CGPAs more than exit exam results (IBID). On the other hand, exams can support quality as one study evaluated whether the scores of physicians on certification exams were associated with the quality of care provided to patients, suggesting a link between test scores and competency (Hu, 2005).

A parallel study at Bonga College highlighted that the cumulative grade point average emerged as a crucial predictor of the success of generalist program student teachers in the exit examination (Geneme et al., 2017). Similarly, stress has been identified as a significant factor contributing to decreased performance among medical students during qualifying examinations (Gebru &

Vervestegn, 2013). These findings underscore the intricate relationship between academic success and factors such as exam structure, stress levels, and assessment criteria, urging a comprehensive reevaluation of the examination's role and impact on students' educational trajectories.

Although the approach to introducing a national exit exam is the right direction to improve quality in the long term, its start has been fraught with major issues. Exit exams in higher education aim to improve students' achievement, enhance graduates' performance, improve the quality of education, and improve their competence in their respective fields of study. They help ensure common standard knowledge and practical competencies, improve public trust, and serve as tools for quality assurance. However, there are concerns regarding the scheme of exit exams, including efforts and costs to maintain the process, potential weaknesses in the education system, and exam administration and management (Eyob & Abraham, 2022). Similarly, there is no effective intervention that addresses equalizing opportunities in higher educational enrollment (Erik and Felix, 2019).

Improving the quality of education has been a major concern of the Ethiopian government, which holds the massification of higher education in the country. This is because the quality of education has not received sufficient attention. Thus, the MoE took serious majors as part of improving the quality of education in the country and administering high-standard national exams has taken precedence, targeting students who graduate from high school and undergraduate studies. In the recent national exit exam, the results of the exam were shocking and raised alarm level high to the quality of education in Ethiopia.

According to the report of MoE (Reporter, 2023), the following outcomes have been official.

Of about 996,000 students, only 3.3 % (about 29.900) scored 50% and above on the national exam.

- MoE plans to prepare a remedial program for students who score 30% or more. They will join the remedial program for one year and sit for a national exam to join universities.
- The highest score was 666 in natural science and 524 in social science.
- Out of 2959 high schools in the country where students sat for this examination, 1161 schools did not have a single student who passed the national exam.

Getting this grim worrying picture of general education in Ethiopia, a groundbreaking initiative was introduced to administer a national exit exam encompassing all undergraduate students to evaluate their performance, appraise institutional quality, and assess overall education standards. While exit exams are not new and have been previously administered to law and health graduates, the incorporation of this comprehensive examination highlights a pivotal shift. Notably, the law exit exam positively impacted law school efforts by extending study duration, yet it fell short of meeting the rigorous quality benchmarks established in 2006 (Stebek, 2019).

With the swift change in introducing the national exit exam in undergraduate programs, many institutions have taken steps to prepare their students for the national exit exam by providing tutorial programs, underlining the importance of tutorial services to prepare students for the exit exam. The evidence on the usefulness of tutorials for being prepared for exit exams is mixed. The average effect of private tutoring is insignificant but may have a significant and positive effect on urban students with lower achievement or in schools of a certain quality (Eyob and Abraham, 2022). However, pedagogical-based interventions were found to be effective in improving chemistry students' performance at Debre Berhan University using simulation, video, and similar techniques (Demmise, 2011). Despite this, tutorials, whether online or classroom-based, do not have a significant impact on learning outcomes in higher education courses (Yu, 2013), In the Ethiopian higher education system, there is a strong association between parental cultural capital and students' entry to and academic performance at public universities. This suggests inequality in higher educational opportunities, and interventions to equalize opportunities have not been effective (Erik, 2012 and Felix, 2019). There is no specific information available on the relationship between tutorials and performance on the national exit exam in Ethiopian higher education.

Different institutions have been preparing their students for the national exit exam by providing tutorial classes in thematic areas identified by the MoE in different programs. In response to the current situation, the HEUC has been preparing prospective graduates for the national exam in two ways. Model examinations were conducted for all prospective graduates. Based on the assessment of the first model exam and the thematic areas of programs, tutorial subjects were identified, and tutorial classes were provided. Towards the end of the semester, a final model exam will be provided to test students’ final academic stand.

2. Statements of the Problem

Since 1992, the government of Ethiopia has expanded education institutions by allowing the participation of the private sector in the field of education (Birhan, 2018). Although Ethiopia has made many efforts to expand its primary, secondary, and tertiary education, the quality of education has been a serious challenge because many students before and after graduation cannot cope with the necessary knowledge for the level (Birhan, 2018).

The recent approach of the government will focus on improving the quality of education by administering national exams to high school and college graduates. The guidelines issued by the Ministry outline the aim of exit as an assessment of the overall competence, employability, competitiveness, and relevance of the skills of students to the labor market in the country (MoE, 2023). Studying the preparation of students for the exit exam will shed light on the attainment of students and the quality of service provided in higher education. This study aims to examine this process by reflecting on the overall performance of students.

Based on the thematic areas and test blueprints of the MoE, HEUC has prepared tutorial programs for prospective graduate students in all departments. The areas of the tutorial classes were identified, and the number of tutorial classes was developed. The following table shows the number of tutorial classes designed, in addition to the regular academic classes of the semester.

Table 1: Programs and proposed tutor hours

Program	Total Proposed Tutor Hour
Architecture	88
Accounting and Finance	96
Marketing Management	90
Management	96
Information system	90
Information Technology	80

The faculties have devised plans for tutorial classes. The business faculty intends to condense the semester and hold tutorial sessions following the conclusion of regular classes. Conversely, the faculties of informatics and school architecture have opted to integrate tutorial sessions into the ongoing semester alongside regular classes.

3. General objective

The general objective of this study was to examine the preparation and performance of HEUC graduates on the national exit exam.

3.1. Specific Objectives

1. To examine the overall assessment of tutorial services provided to prospective graduates of HEUC.

2. To assess whether tutorial programs contributed to students' readiness to take an exit exam.

3. To examine the relationship between CGPA and exit exams.

3.2 Research Questions

1. How satisfied are students with the tutorial class service at HEUC?

2. What is the overall readiness of students and their evaluations of the tutorial program?

3. What are the relationships between CGPA and the results of the exit exam in HEUC?

4. Methodology

A Mixed research methodology is a research approach that combines quantitative and qualitative research methods. The study applied a mixed method approach concurrently with an iterative approach to collect qualitative data from student teachers and academic staff at HEUC (Creswell, 2010). In addition, all the necessary documents related to the tutorial program and exit exam will be used as secondary data for the research.

Short questionnaires developed by Dolman and Ginns (2014) were used to study the effectiveness of tutorial services provided at HEUC. The instrument was validated with a good reliability score in Australia (Dolman & Ginns, 2014). The reliability of the questionnaire was assessed in the Ethiopian context. The instrument focuses on a few scales, such as squatting for self-directed learning and related factors on a Likert scale. The instrument is short and easy to respond to, so students may not ose interest in filling out the answers. In addition to the survey, a focus group discussion was held with students and instructors who delivered the tutorial classes.

In addition to reflecting on the quality of the tutorial program, a comparison of student assessments of the tutorial program was conducted among the departments.

4.1 Sample size

The total number of HEUC graduates was 409. Of these, 204 were randomly selected for the study using Slovin's formula and the cluster sampling technique.

$$\mathbf{n = N / (1 + Ne^2)}$$

Where:

n = Number of samples,

N = Total population and

e = Error tolerance (level).

The same population is described as follows:

Table 2: Propotonate Sample Size by Programs

No	Department	Selected sample size
1	Accounting and finance	65
2	Management	20
3	Marketing Management	33
4	Information Technology	18
5	Information Science	9
6	Architecture	49
7	Extension students	10
8	Total sample size	204

4.2 Data Analysis

This multi-method and mixed-method research design will be conducted concurrently using an iterative approach to collect and analyze qualitative data. (Hesse-Biber & Johnson, 2015; (Creswell, J.) W. & Creswell, J. D., 2018) (Hesse-Biber & Johnson, 2015) Creswell, J.W. and Creswell, J.D., 2018).

A descriptive analysis of the instrument is used to see the overall evaluation of the tutorial service by students. This includes an analysis of the reliability score of the instrument, in addition. An analysis is made of the qualitative information collected and the responses were summarized in four main themes that support the survey.

One-way analysis of variance (ANOVA) and binary logistic regression are both statistical tests that are used to compare two or more groups. Binary logistic regression is used to study the predictive variables on the exit exam. Attempts are made to relate the findings of the survey with the CGPA of students in the fourth year of HEUC. A paired sampled t-test p will be named by comparing two mode exams as well as seeing their relation with the CGPA. Linear regression analysis is used to predict the final mode exams by continuous assessments taught by the same instructors across different departments and sections.

5.Scope of the study

The scope of this research is to examine the preparations of students waiting for the national exit exam for prospective graduates of HEUC. Faced with the new context of the national exit exam, the study will focus on the preparation of students and HEUC for the national exit exam. The study will aim to identify the unique challenges faced by students and instructors in conducting tutorial classes and model exams in HEUC.

To achieve these objectives, the research will employ a mixed-methods approach, combining quantitative surveys and qualitative interviews with key informants as shown above in the methodological section. The research will also explore the implications of these challenges for the broader teaching and learning process in HEUC about attaining the curricular objectives of different programs.

5.1. Significance and Expected Outcomes of the study:

The research project is expected to yield the following outcomes:

- A better understanding of the challenges facing prospective graduates in preparing for the national exam.
- Identifying opportunities for improving the modes of Operandi in preparing students for the national exit exam.
- A series of actionable recommendations for education leaders and policymakers will be produced from the study based on the findings of the study.

5.2. Limitations of the study

This study focuses on the current HEUC students using cluster sampling. The limitation can come from many aspects of the study. It was attempted to get the model exam results of HEUC students from MoE and this data was not provided. Thus. not using this data could have been used as a good tool in comparing the readiness of our students against the exit exam results.

The students may not understand the concepts in the questionnaire and or may not be interested in reflecting their genuine opinions or expressing their biases in one way or another with the tutorial services. In other words, non-sampling errors can result from students not filling out their survey completely, differences in interpreting survey items, students' unwillingness to be truthful, and bias arising from an underrepresented population (Deming, 2006).

5.3. Ethical Considerations

All the ethical rules about research will be respected during this activity. All participants will be asked for their consent to participate in the research and their confidentiality will be respected. The research does not expect any harm to the participants.

The researcher strives for honesty in all scientific communications. Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data.

6. Variables: Dependent variables

The analysis has been made in two steps. The first step of the analysis is made about the tutorial survey assessing the way the service was evaluated by students. At this stage, CGPA is a dependent variable which shows the four and or five year's cumulative assessment of students.

Part II: Independent

Table 3: Problems-based learning instrument

Constructive/active learning	The mean score of 2 items.
Sharing Blueprint of the Exit Exam	The mean score of 2 items.
Self-directed learning	The mean score of 2 items
Contextual learning	The mean score of 2 items
Collaborative learning	The mean score of 2 items
Intra-personal behavior of instructors conducting the tutorial	The mean score of 4 items
Total number of Items	14

In the second step of analysis, the total CGPA of graduates was used as independent variables whereas the exit exam results of HEUC graduates were used as Dependent variables.

7. The Conceptual Framework of the Study

The conceptual framework reflects the relationships that are seen in the variables of the study providing a coherent perspective of factors that may affect the outcome of the national exit exam. It is based Self-Determination Theory (SDT), developed by Deci and Ryan (2000 and 2017), posits that individuals are inherently motivated to pursue activities that fulfill their basic psychological needs for autonomy, competence, and relatedness. In the context of the provided framework, SDT offers valuable insights into how the learning-teaching environment and instructors influence students' Cumulative Grade Point Average (CGPA).

According to SDT, the satisfaction of basic psychological needs within the learning environment is essential for intrinsic motivation and optimal functioning. Students who perceive their learning

environment as supportive of autonomy, competence, and relatedness are more likely to experience greater academic motivation and achievement (Reevem 2016: Ryan and Deci, 2017).

The framework suggests that the study is examining the relationship between the learning environment, instructors, CGPA (Cumulative Grade Point Average), and performance on a National Exit Exam. The framework implies that these educational factors are being studied to understand their influence or correlation with students' outcomes on the National Exit Exam.

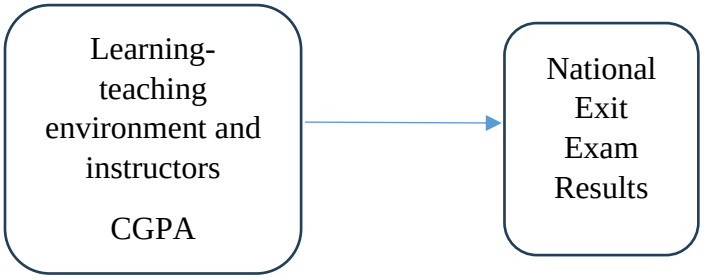

Figure: Conceptual framework of the study

8. Reliability of the Instrument

The development of the individual items in 'A short questionnaire to evaluate the effectiveness of tutorial in PBLA was used on HEUC graduates of 2022/23, The instrument was designed to study a tutorial program that focuses on problem-based learning (Dolmans & Ginnsa, 2005). The instrument was adopted with minor changes that fit the Ethiopian context. As part of this, their relativity is checked using Table 2: Cronbach Alpha so that only those reliable scales in the present context can be used.

Table 4: Cronbach Alpha so that only those reliable scales in the present context can be used.

Items	Cronbach Alpha	
Constructive/active learning	**.79**	**2**
The tutorial program stimulated us to summarize what we had learned in our own words with good course coverage. The tutorial program stimulated us to search for links between issues discussed in the tutorial group. The tutorial program stimulated us to understand underlying mechanisms/theories supplying quality course materials. Deleted	.445	3
Sharing Blueprint of the Exit Exam	**.679**	**2**
The tutorial is designed in a way as per the blueprint sent by MoE. The tutorial is supplemented with model/mock questions.		
Self-directed learning	**.785**	**2**
The tutorial program stimulated us to generate clear learning issues by ourselves. The tutorial program stimulated us to search for various learning resources by ourselves.		
Contextual learning	**.835**	**2**
The tutorial program stimulated us to apply knowledge to the discussed problem. The tutorial program stimulated us to apply knowledge to other situations/problems.		
Collaborative learning	**.852**	**2**
The tutorial teachers stimulated us by giving constructive feedback about our group work. The tutorial program stimulated us to evaluate group cooperation regularly.		
Intra-personal behavior	**.693**	**4**
The tutorial teachers were often absent from class. The tutorial teachers often gave make up classes to take care of missed classes. The tutorial teachers had a clear picture of his strengths/weaknesses as a tutor The tutors clearly motivated us to fulfill their roles as tutorial teachers.		
Total Cronbach score	**.869**	**15**

The overall items with five sub-scales have a Cronbach Alpha of .869. A Cronbach's alpha of .70 or greater is considered reliable. Researchers define Cronbach's alpha as a measure of reliability that ranges from 0 to 1, with values of .60 to .70 deemed the lower limit of acceptability (Hair, Anderson, Tatham, & Black, 1998).

As seen above in the table, one of the subscales of Constructive/active learning is not reliable scoring below .445 with three items. If one of the items "The tutorial program stimulated us to understand underlying mechanisms/theories supplying quality course materials" was deleted, the Cronbach Alpha was improved significantly to .79. Thus, the item was deleted to improve the overall reliability of the subscale and the total instrument.

9. Presentation of the Results of the Survey and Discussions

The total sample size of the study was 204. Out of these, 162 questionnaires were filled and complied reflecting a response rate of 80%. The following table shows the characteristics of the survey-sampled population. The same population is described as follows:

Table 5: Survey Sample Population

No	Department	Male	Female	Total
1	Accounting and finance	16	40	56
2	Management	10	9	19
3	Marketing Management	11	21	32
4	Information Technology	10	9	19
5	Information Science	5	6	11
6	Architecture	18	7	25
7	Total sample size	70	92	162

10. Discussions of Quantitative Data Results

The first two research questions examined the evaluations of the tutorial programs where there are differences in assessing the tutorial programs across programs. The last question examined whether there were relationships between the levels of academic integration and staying the

campus for three or more years. The following table shows the level of academic integration by taking one of the two subscales that are reliable in the survey. Participants were given statements regarding their behaviors and attitudes related to problem-based learning and asked to indicate their agreement or disagreement with the statements using a Likert-type scale

The next table provides a display of the mean and standard deviation for the independent variable used.

Table 6. Mean and Standard Deviation – tutorial instrument of five subscales

Scales	**N**	**Mean**	**SD**
Constructive/active learning	162	3.50	1.07
Sharing Blueprint of the Exit Exam	162	3.29	1.13
Self-directed learning	162	3.31	1.04
Contextual learning	162	3.33	.89
Collaborative learning	162	3.00	1.16
Intra-personal behavior	162	2.96	.93

10.1 One-way ANOVA analysis

Further analysis was done on the data to see if there are differences among students of different programs in academic and social integration scales. One-way ANOVA with the Games Howell test was used to see the difference as the sample population across departments is not equal.

The assumption of homogeneity was not met on the social integration subscales, because p (.001) < (.05). This is indicated by Levene's Test of Homogeneity of Variances for self-directing learning, F (5, 156) = 2614, p = .027. Four of the six subscales with an alpha level of .05, p (.001) < α (.05), which indicates significance. This indicates that the assumption of homogeneity of variance is not met. The table below shows this.

Table 7: Test of homogeneity of variance

Test of Homogeneity of Variances				
Scale	**Levene Statistic**	**df1**	**df2**	**Sig.**
Active Learning	1.785	5	156	.119
Sharing blue print	1.925	5	156	.093
Self-directed learning	2.614	5	156	.027
Collabo	3.556	5	152	.005
Intra behavioral	3.278	5	154	.008
contextual learning	2.880	5	156	.016

Source: The Survey Data

Since the assumption of homogeneity of variance was not met for this data, Welch's adjusted F ratio was used to see the significance of differences which was significant at the .05 alpha. Welch's $F(5, 55.259) = 6.992$, $p < .05$. This shows that the groups significantly differ in their score on the Active learning subscale of the PBL scale. The following shows Welch's test for all subscales.

Table 8: Robust Tests of Equality of Means

		Statistic[a]	**df1**	**df2**	**Sig.**
Active Learning	Welch	6.992	5	55.259	.000
Sharing blue print	Welch	7.026	5	53.504	.000
Self-directed learning	Welch	6.412	5	53.328	.000
Collabo	Welch	5.320	5	51.930	.001
Intra behavioral	Welch	6.082	5	51.114	.000
contextual learning	Welch	7.862	5	53.174	.000

a. Asymptotically F distributed.

Following this, the Games-Howell post hoc procedure is used since the homogeneity of variance assumption was not met to see the differences pairwise using an alpha level of .05. The differences in the six subscales are illustrated below.

Table 9: Significant Differences in the Mean Score of the Tutorial Program across all Programs

Subscales	**Differences in Departments**	**Mean Differences**	**Significance**
Active Learning	Accounting and Information system	-1.01461	P(.000) < α (.05)
	Management and Information systems	-1.6028	P.(011) < α (.05)
	Information technology and information systems	-1.00239	P.(013) < α (.05)
	Information systems and architecture	.91919	P(.044) < α (.05)
Sharing blue print	Accounting and marketing management	-.67188	P(.038) < α (.05)
	Accounting and Information systems	-72159	P(,038) < α (.05)
	Management and marketing management	-.1.33308	(.001) < α (.05)
	Marketing management and information technology	1.06690	P(.009) < α (.05)
	Information technology and information systems	-1.11982	P(.009) < α (.05)
Self-directive learning	Accounting and information systems	-1.16721	P(.000) < α (.05)
	Management and information systems	1.28488	P(,011) < α (.05)
	Marketing Management and information systems	-.94178	P(.005) < α (.05)
	Information technology and information systems	-1.100239	P(.013) < α (.05)
	Information systems and architecture	.81818	P(.044) < α (.05)
Collaborative learning	Accounting and information systems	-1.22240	P(.002) < α (.05)
	Management and IS	-.9.0524740	P(.052) < α (.05)

	IT and IS	-1.34929	P(,002) < α (.05)
Intra behavioral	Accounting and IS	-1.26529	P(.000) < α (.05)
	Management and IS	-1.25080	P(.003) < α (.05)
	Marketing management and IS	-.87551	P(.029) < α (.05)
	IT and Architecture	.90243	P(.009) < α (.05)
Contextual learning	Accounting and IS	-1.11282	P(.000) < α (.05)
	Management and IS	-1.00239	P(.030) < α (.05)
	Marketing management and IS	-.94349	P(.001) < α (.05)
	IT and IS	-1.29187	P(.000) < α (.05)
	IS and Architecture	-.93818	P(.037) < α (.05)

As we can see above, there are significant differences in the mean score of the tutorial program across all programs. Specifically. The Department of Information Systems and Information Technology students rated the tutorial programs higher than other programs showing significant differences. The following mean scores table for all subscales and departments clearly describes this.

Table 10: Summary of Mean Scores of Subscales by Departemtnt

Department	Active learning	Sharing Blue print	Self-direct learning	Collaborative Leering	Contextual learning	Intra-behavioral
Accounting N=56	3.1579	2.5263	3.0789	3.0000	2.7719	3.3158
Management N=19	3.9063	3.8594	3.4219	3.1071	3.0472	3.3750
Marketing Management N=32	3.3158	2.7895	3.1842	2.6053	3.1272	3.0263
IT N=19	4.3182	3.9091	4.3636	3.9545	4.0227	4.3182
IS N=11	3.5000	3.5200	3.2800	3.4200	2.8900	3.3800
Architecture N=25	3.5062	3.2963	3.3179	3.0095	2.9651	3.3333

10.2. CGPA and National Exit Exam

Before using binary regression, we checked the assumptions of binary regression. The first assumption is that the outcome variable is binary, meaning that there are only two possible values for the outcome, such as “success” or “failure.” This assumption is met as the exit exam divided the outcome as pass and fail based on the 50% score in the results. The second assumption is that the observations are independent, as the exam results are not released once and are not repeated. The third assumption is to have a large and sufficient sample size. This implies that the sample has at least 10 records for each outcome of the record. In the sample, we have eight predictors (2 genders and six departments). Thus, the sample size of 425 is a good size for binary regression. The predictor variables are checked for multicollinearity and outliers. The data was not very much affected by these factors.

I used the logistic binary regression model to predict the probability of HEUC students passing the national exit exam based on their CGPA. The results of the model showed that there is a significant relationship between CGPA and the probability of passing the national exit exam, but this varies in different programs.

The model also indicated that other factors were associated with the probability of passing the national exam, although these were not thoroughly investigated due to data that were not disclosed by the Ministry of Education, such as the model and national exit exam contents. However, the CGPA was one of the most important factors in predicting the probability of passing the exam.

To discuss the details of SPSS results, we performed a logistic regression to ascertain the effects of CGPA about gender and HEUC programs on the likelihood that participants have passed the national exit exam. The logistic regression model was statistically significant, $\chi 2(7) = 216{,}621$, $p < .000$. The model explained 6.9% (Nagelkerke R2) of the variance in passing the national exit exam.

Table 11: Omnibus Tests of Model Coefficients

		Chi-square	**Df**	**Sig.**
Step 1	Step	289.281	7	.000
	Block	289.281	7	.000
	Model	289.281	7	.000

In this table, $\chi 2 = 289.28.452$, $p = .000$. We conclude that the full model is significantly different from a constant-only or null model (even odds); therefore, the model is a significant predictor of the dependent variable.

Step 2. Evaluate the strength of the association between the model (all independent variables) and the dependent variable using the Model Summary table:

Table 12: Model Summary

Step 2	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	269.319[a]	.502	.679

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

The strength of the association between the model composed of two independent variables and the dependent variable (the strength of the model, or goodness-of-fit) is based on *Nagelkerke's R2 = .679. Only 6.8% of the variation in the dependent variable is attributed to the model. We conclude

that while the model is a significant predictor of the dependent variable, it is likely other independent variables that may be significant predictors.

The main important part of the analysis is assessing the likelihood of CGPA in predicting the exit exam, The following table presents the strength of the association between each independent variable and the dependent variable using the Variables in the Equation table:

Table 13: Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Depart			95.874	5	.000			
	Depart(1)	4.003	.657	37.158	1	.000	54.743	15.115	198.266
	Depart(2)	2.243	.435	26.552	1	.000	9.422	4.014	22.114
	Depart(3)	-2.692	.501	28.856	1	.000	.068	.025	.181
	Depart(4)	5.125	1.135	20.373	1	.000	168.201	18.168	1557.258
	Depart(5)	-2.155	1.084	3.952	1	.047	.116	.014	.970
	CGPA	3.966	.546	52.672	1	.000	52.755	18.078	153.949
	SEX(1)	.312	.324	.926	1	.336	1.366	.723	2.580
	Constant	-13.204	1.826	52.259	1	.000	.000		

a. Variable(s) entered on step 1: Depart, CGPA, SEX.

We use the Wald ratio for each of the independent variables and its associated p-value: $\chi 2(1) = 37.158$, p = .000; and $\chi 2(1) = 26.552$, p = .000, and $\chi 2(1) = 20.373$, p = .000, respectively. We conclude that the coefficients for both of the independent variables are significantly different from those in the even odds (null) model; therefore, these independent variables are significant predictors of the dependent variable or the CGPA of departments for the exit exam.

The results of this study suggest that GPA is a good predictor of whether or not a student will pass the national exit exam. This information can be used to help students improve their chances of

passing the exam. For example, students with low GPAs may need to take additional courses or tutoring to improve their chances of passing the exam.

The results of this study also suggest that other factors are associated with the probability of passing the exam, such as gender and race. These factors should be considered when developing programs to help students pass the national exit exam.

11. Discussion on the Qualitative Data

With the coming of the national exit exam in higher education, many aspects of quality in education were raised. The Ministry of Education stated that the aim of the national exit exam is geared to improve the deteriorating quality of education in the past decades (MoE, 2023). Qualifying exam is not the same as quality of education. The former focuses on a test that is used to assess a student's knowledge and skills in a particular subject area. It is typically administered at the end of a course or program of study, and the results may be used to determine whether the student has met the requirements for graduation or certification (Eyob, 2022). On the other hand, the quality of education is a measure of the effectiveness of a school or educational program in providing students with the knowledge and skills they need to succeed in life. It is typically assessed based on factors such as student achievement, teacher quality, and school resources (Tamrat, 2022).

In addition to this, quality-oriented education and examination-oriented education do not repel each other but exam-oriented education reflects the nature of education, not the reality reflecting the value-based approach (Ding, 2001). Based on the opinions collected from instructors in the subject areas of HEUC, issues have been shading questioning the qualifying capacity of the exit exam. The following table summarizes the opinions of instructors although data on the exit exam is not openly available.

Exit exams not in line with the curriculum and blueprint	Exit exams in line with the curriculum and blue print
Accounting and Finance Information Technology Architecture	Marketing Management Management Information systems

The following opinion was taken from instructors of Accounting and finance. The blueprint identified the thematic areas (it is compiled). It identified the exam to be Cognitive items (84), Affective items (4%) and Psychomotor items (11%) (this is not complied). Here is the major deviation. Instead of understanding more of evaluation and application was tested in the exam. The exam even consisted of homework questions when I traced them back to their source, there were questions from ACCA professional papers. So my conclusion is it is not set to the student's level. (Instructor, July 19, 2023).

Similarly, based on the information gathered from students, the marketing management exit exam was analyzed by the subject matter instructor. His analysis showed that 98 questions of the exit exam were in line with the blueprint and curriculum. This reflects that the national exit exam in marketing is better related to the curriculum.

This assessment is based on the opinions of instructors but the view of the MoE stands against this. Public higher education is formed to formally request the Ministry to audit the exam level. The MoE reported the result of the audit that exit exams in accounting and it was reported that major issues were not identified in the national exit exam dismissing all the complaints made against it by institutions, instructors, and students (Tekle, 2023).

11.1 Students' Reflections on the Exit Exam and Tutorial

Components of the service	Positive evaluations	Details	Critical comments	Details
Contents of the tutorial (blueprint)	-focused on architectural procedures -Tutorials were supported with materials. -Tutorials motivated us to study more. -some new concepts were covered in the tutorial.	-blueprint followed -the model exam was related to the blueprint of accounting. -Some teachers gave us model questions which were useful.	-Exit exam focused on architectural practices. -The tutorial doesn't cover the blueprint	The tutorial should have focused on architectural practices. -The tutorial was not problem-focused. It was like a hasty class conduct. -Instructors should have prepared course materials in line with the blueprint. -dissatisfied with the tutorial. It was a waste of time. -Should have more problem questions to prepare us.
Timing of tutorial	Is good to have the tutorial after final exams.		-The tutorial was given at the wrong time when we were busy with the graduation project.	We didn't benefit from the tutorial as much as we expected. -Should have balanced time for tutorial and senior essay. -Timing should have been spread so that students are not under pressure.
Supporting instructors	-Teachers were open and ready to help.	-some teachers tried to help by providing us with materials and questions. --Didn't get the preferred teachers in the tutorial. Apart from this, the tutorial was useful.	-some teachers taught us like normal class. We didn't get the teachers that we preferred.	-Some teachers were ill-prepared and considered the tutorial as a conventional class. There was a shortage of teachers. One teacher was covering many areas. -Some teachers didn't make the class interactive and problem-solving sessions. -Some teachers should change the ways they teach. Don't consider the interests and ideas of students. -Some teachers were reading a text in tutorial class. Not helpful.

Exit exam			-Not related to the blueprint and the curriculum. -Exit exam doesn't evaluate our knowledge. -Exit exam covers few areas competence areas in accounting and it doesn't evaluate our knowledge in the subject. -Not more than 20% of the questions related to the blueprint in Architecture.	-We used the model exams of Awassa and other exams of public universities in management. That was helpful. -Difficult to be prepared for the exam in conventional study methods. There were questions that could be answered using intuition and critical thinking. -Memorizing concepts doesn't help. -30 minutes were cut from invigilation time in accounting exam. -The website where we took the exam was different from the website where the results were released.

The analysis of the themes in the provided feedback on the tutorial service and exit exam can be grouped into four major components: the contents of the tutorial, the timing of the tutorial, the supporting instructors, and the exit exam. Each component features both positive evaluations and critical comments, reflecting the mixed experiences of the students.

The feedback reflects a mixed experience with the tutorial services and exit exams, highlighting areas for significant improvement. Critical issues include better alignment of tutorial content with the blueprint, improved timing, enhanced teacher preparation and engagement, and a more relevant and comprehensive exit exam. Addressing these concerns can lead to a more effective and satisfactory educational experience for students.

The tutorial was generally well-received, with students appreciating the focus on architectural procedures, the use of materials, and the motivation to study more. However, there were some critical comments, including that the tutorial did not cover the blue print, was not problem-focused, and did not provide enough practice questions. The timing of the tutorial was also criticized, as it was given during a busy time when students were working on their graduation projects. The supporting instructors were generally seen as helpful, but some students felt that they did not get

the teachers they preferred. The exit exam was also criticized, as it was not related to the blue print, did not evaluate students' knowledge, and was difficult to prepare for.

12. Conclusion and Recommendations

12.1 Conclusions

The descriptive and one-way analysis of the survey reflected that the tutorial program was rated well with higher rating in the Information and Technology students than in other programs. The tutorial programs intimated students to be prepared for the exit exam.

Overall, the tutorial was seen as a positive experience, but there were some areas that could be improved. The tutorial could be more closely aligned with the blue print, be more problem-focused, and provide more practice questions. The timing of the tutorial could also be improved, and students should be given more input into the selection of instructors. The exit exam could be more closely aligned with the blue print, be more evaluative, and be easier to prepare for.

The controversy surrounding the national exit exam will continue. The view of instructors and students put into questions the qualifying nature of the national exit exam although this has not been supported by the MoE.

The Binary logistic analyses reflected the context we have. CGPA predicts the results of the national exit exam but not in all programs as we have issues in the content of the some of the exit exams. Gender has no influence of the results of the national exit exam.

12.2 Recommendations

Overall, it seems that there is a need for more communication and coordination between the University College and the students. The UC should make sure that students are aware of the tutorial program and its benefits, and that they are given the opportunity to provide feedback. The University College should also make sure that the tutorial program is well-organized and that the teachers are prepared to teach the material.

Here are some specific suggestions for improvement:

- Enhancing the tutorial program entails closer alignment with the exit exam blueprint of MoE, a shift toward problem-focused sessions, and an increase in the number of practice questions available.
- Improving the timing of tutorials and granting students more involvement in instructor selection would enhance the overall tutorial experience.
- Aligning the exit exam more meticulously with the blueprint, infusing a more evaluative approach, and ensuring ease of preparation are imperative measures.
- Addressing the controversies encircling the national exit exam falls within the responsibility of the Ministry of Education (MoE).
- The MoE should heed the perspectives of both instructors and students in pivotal decisions pertaining to the national exit exam.
- Conducting a thorough investigation into the content issues of certain exit exams is crucial for the MoE.
- Opening up the model and exit exam for research purposes can foster transparency and facilitate further studies to elevate the quality of education, aligning with the overarching goal set by the MoE.
- While it's premature to ascertain the success of these initiatives, they signal a positive trajectory. Successful enhancements in education quality will profoundly impact Ethiopia's future.
- A pivotal step toward improving education quality is substantial investment in teacher training. The shortage of qualified educators, particularly at the university level, underscores the necessity for government-backed teacher training initiatives.
- Augmenting resources allocated to universities stands as another critical imperative. Ethiopian universities face resource disparities compared to those in developed nations, hindering their ability to deliver high-quality education. Increased governmental support is indispensable to bridge this resource gap and uplift educational standards. If the government is successful in improving the quality of education, it will have a positive impact on the future of Ethiopia. A better-educated population will be more productive and will be able to contribute more to the economy. A better-educated population will also be more likely to participate in democracy and to hold the government accountable.

References

Abate, T. Wuddu, and Dawud, Shemsedin Abdu (2020). *Journal of Education and Practice* www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.11, No.22, 2020.

Abebaw, Yirga, Adamu (2015). The contribution of credit accumulation and transfer system: Lessons to the Ethiopian national qualifications framework. Bahir Dar Journal of Education 15 (1).

Abebaw, Yirga, Adamu. (2015). The Contribution of Credit Accumulation and Transfer System: Lessons to the Ethiopian National Qualifications Framework.

Akalu, Girmaw Abebe. (2014). Higher Education in Ethiopia: Expansion, Quality Assurance and and Institutional Autonomy. Higher Education Quarterly, 68(4), 394-415.

Akalu, Girmaw Abebe. (2014). Higher Education in Ethiopia: Expansion, Quality Assurance and Institutional Autonomy. Higher Education Quarterly, Vol 68, No. 4, PP 394-415.

Alice, Mota., Beatriz, Lisbôa, de, Carvalho., Ludmilla, Candido., Raisa, Lomanto., Thaís, Maia. (2014). The São Paulo state regional medical council exam as an indicator of quality in medical education. doi: 10.1590/S0100-55022014000100020

Asalf, Habtegeorgis., Girish, Chandra, Maheshwari., Rajan, Yadav. (2021). A Study on Quality management: Challenges and Prospects of Ethiopian Universities.

Ayenachew, A., Woldegiyorgis. (2017). The Vicious Circle of Quality in Ethiopian Higher Education. International higher education, doi: 10.6017/IHE.2017.90.10001

Ayenew, E., & Yohannes, A. G. (2022). Assessing higher education exit exam in ethiopia: practices, challenges and prospects. Science Journal of Education, 10(2), 79-86.

Ayenew, E., & Yohannes, A. G. (2022). Assessing higher education exit exam in ethiopia: practices, challenges and prospects. *Science Journal of Education*, *10*(2), 79-86.

Beyene, Melkamu, Tekle, S. M., & Alemneh, D. G. (2022). Open Access Initiatives in Ethiopia's Higher Learning Institutions. In *Handbook of Research on the Global View of Open Access and Scholarly Communications* (pp. 23-43). IGI Global.

Birhan, Getachew. (2018). Factors Affecting Student's Academic Performance in Ahuntegen General Secondary School. Journal of Education and Learning, 12(2), 198-206.

Bishaw, Alemayehu and Melese, Solomon. (2017). Historical Analysis of the Challenges and Opportunities of Higher Education in Ethiopia

Borden, V M 2010. The accountability/improvement paradox. Inside Higher Ed (vol. 20). Viewed August 3, 2014 at http://www.insidehighered.com/node/19231/atom.xml.

Demissie, Tesfayem Ochonogor, Chukunoye E. and Engida. Temechegn (2011). Pedagogy-Based-Technology and Chemistry Students' Performance in Higher Institutions: A Case of Debre Berhan University. US-China Education Review A 5 602-611.

Desta, Daniel. (2004). Observations and Reflections of the Higher Education Teachers on the Quality of Teaching and Learning in Higher Education in Ethiopia. Vol. 1 No. 1 (2004): The Ethiopian Journal of Higher Education.

Ding, Yuan-kun. (2001). Quality-oriented Education and Examination-oriented Education Are not Opposite to Each Other. Academic Exchange,

Dolmans, Diana h.j.m & ginnsa, paul. (2005). short questionnaire to evaluate the effectiveness of tutors in PBL: validity and reliability. Medical Teacher, 27(6), 534–538

Erik, Merkus., Felix, Schafmeister. (2021). The role of in-person tutorials in higher education. Economics Letters, doi: 10.1016/J.ECONLET.2021.109801

Ewell, Peter. (2009). Assessment, Accountability, and Improvement: Revisiting the Tension. **National Institute for Learning Outcomes Assessment**.Avai;abe at: https://www.researchgate.net/publication/237565248_Assessment_Accountability_and_Improvement_Revisiting_the_Tension

Francis Atuahen (2021). "Predicting The Academic Success of Minority Male Students in A Public 4-Year Institution in The USA", JOURNAL OF AFRICAN AMERICAN STUDIES, 2021.

Gebremedhin, M. A., & Fenta, A. A. (2015). Assessing Teachers' Perception on Integrating ICT in Teaching-Learning Process: The Case of Adwa College. *Journal of Education and Practice*, *6*(4), 114-124.

Gebru, Haftie Teklay and Verstegen, Daniëlle (2013). Assessing predictors of students' academic performance in Ethiopian new medical schools: a concurrent mixed-method study. BMC Medical Education 23:448

Geneme, D., Atnafu, M., Weldetinsae, E., & Tefera, A. (2017). Affective and Cognitive Variables as Determinant of College Exit Examination Achievement in Bonga College of Teacher Education, Ethiopia. Journal of Educational and Human Resource Development (JEHRD), 5, 23-33.

Geneme, Desta, Atnafu, Mulugeta, Weldetinsae, Esayas and Tefera, Anteneh (2017). Affective and Cognitive Variables as Determinant of College Exit Examination Achievement in Bonga College of Teacher Education, Ethiopia. Journal of Educational and Human Resource Development 5:23- (2017)

Gurmesa, Jabesa and Bayisa, Teshome (2015). Pay and Performance in Ethiopian Higher Education: Implications Towards Staff Motivation And Engagement. *European Journal of Business and Management,* Vol, 7, PP 328-339.

Harvey, L. & Williams, J. (2010) Fifteen Years of Quality in Higher Education , Quality in Higher Education, 16:1, 3-36, DOI: 10.1080/13538321003679457

Higher Education for the Future 4(1):31-43 DOI:10.1177/2347631116681212

https://www.thereporterethiopia.com/35594/

HU, Zhong-ping. (2005). On the Opposite of Quality-oriented Education to Exam-oriented Education. Journal of Curriculum Teaching Material and Method, Availabe at https://www.semanticscholar.org/paper/On-the-Opposite-of-Quality-oriented-Education-to-Zhong-ping/0a715bb68070a6989941ca0ebc4837b063132227

King, M. L. (1978). Research in composition: A need for theory. *Research in the Teaching of English*, *12*(3), 193-202.

Mohd, Moshahid. (2016). Predictors of Academic Performance. Available at https://www.amazon.com/Predictors-Academic-Performance-Mohd-Moshahid/dp/3330002220#detailBullets_feature_div

Mulugeta, M., Abay., Nylon, Ramodikoe, Marishane. (2023). Challenges Facing the Leadership of Ethiopian Higher Learning Institutions in Assuring Quality Education. Journal of Educational and Social Research, doi: 10.36941/jesr-2023-0046

Reggasa, Tsegaye (2010). Between Closure and Opening: Exit Exam in Law Schools. Ethoppian Jpouna; of Law Education available at https://www.researchgate.net/publication/303459599_Between_Closure_and_Opening_Exit_Exam_in_Law_Schools

Sánchez-Carracedo, F., Ruiz-Morales, J., Valderrama-Hernández, R., Muñoz-Rodríguez, J. M., & Gomera, A. (2021). Analysis of the presence of sustainability in Higher Education Degrees of the Spanish university system. *Studies in Higher Education*, *46*(2), 300-317.

Seid M., Mizane A., Belay H., Addiswork T., Abduljebar A., Yenehun B., Endawek T. & Nurlign M. (2018). Evaluation of Law Exit Examination System in Ethiopia; An Overview Assessment available at https://www.academia.edu/73818391/Evaluation_of_Law_Exit_Examination_System_in_Ethiopia_An_Overview_Assessment

Semela, Tesfaye. 2011. "Breakneck Expansion and Quality Assurance in Ethiopian Higher Education: Ideological Rationales and Economic Impediments." Higher Education Policy 24 (3): 399–425.

Son, H. T., Ha, N. T., & Khuyen, P. T. M. (2018). Measuring students' satisfaction with higher education service – An experimental study at Thainguyen University. International Journal of Business Marketing and Management (IJBMM), 3(4), 21–34

Stebek, Elias N. (2019), "Legal Education Reform Pursuits in Ethiopia: Attainments and Challenges", Mizan Law Review, Vol. 13, No. 2, pp. 233-283.

Tadesse, T., Manathunga, C. E., & Gillies, R. M. (2018). Making sense of quality teaching and learning in higher education in Ethiopia: Unfolding existing realities for future promises. Journal of University Teaching & Learning Practice, 15(1). https://doi.org/10.53761/1.15.1.4

Tekle, Abraham. (2023). Shut out of graduation, trapped outside gates available at https://www.thereporterethiopia.com/35594/

Tessema, A. and Abebe, M. (2011) 'Higher education in Ethiopia: challenges and the way forward', Int. J. Education Economics and Development, Vol. 2, No. 3, pp.225–244.

Williams, J., Harvey, L. (2015). Quality Assurance in Higher Education. In: Huisman, J., de Boer, H., Dill, D.D., Souto-Otero, M. (eds) The Palgrave International Handbook of Higher Education Policy and Governance. Palgrave Macmillan, London. https://doi.org/10.1007/978-1-137-45617-5_27

Wondowosen, Tamrat. (2022). Higher Education in Ethiopia. DOI:10.1163/9789004513488 Edition: Global Perspectives on Higher Education, Volume: 52Publisher: BrillISBN: 9789004513471

World Bank. (2009). accelerating catch-up: Tertiary education for growth in Sub-Saharan Africa. Washington, DC.

Yirdaw, Arega (2016). Quality of Education in Private Higher Institutions in Ethiopia: The Role of Governance. SAGE Open,: 1 –12 © The Author(s) 2016DOI: 10.1177/2158244015624950 availabe at https://www.researchgate.net/publication/289570508_Quality_of_Education_in_Private_Higher_Institutions_in_Ethiopia_The_Role_of_Governance

Yu, Zhang. (2013). Does Private Tutoring Improve Students' National College Entrance Exam Performance?--A Case Study from Jinan, China.. Economics of Education Review, doi: 10.1016/J.ECONEDUREV.2012.09.008

Zaki S. and Rashidi M.(2013).Parameters of Quality in Higher Education: A Theoretical Framework. Vol.3 Issue 4, ISSN: 2223- 4934 E and 2227-393X