ANWARUL
Jurnal Pendidikan dan Dakwah

e-ISSN : 2808-7895
p-ISSN : 2809-1043

Terindeks: Sinta 5, Copernicus, Dimensions, Scilit, Lens, Semantic, Garuda, Google,

https://doi.org/10.58578/anwarul.v5i3.6167

THE ADVERSE IMPACTS OF EXIT EXAMS IN HIGHER EDUCATION: A SYSTEMATIC REVIEW

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Article Info:

Submitted:	Revised:	Accepted:	Published:
May 1, 2025	May 29, 2025	Jun 10, 2025	Jun 15, 2025

Abstract

Exit exams in higher education are widely implemented as tools for quality assurance, accountability, and the assessment of student learning outcomes. Despite their intended benefits, these assessments have been linked to various negative consequences affecting students, institutions, and educational systems. This systematic literature review critically evaluates the adverse impacts of exit exams by synthesizing peer-reviewed studies published between 1994 and 2024, following the PRISMA framework. The analysis reveals that exit exams disproportionately disadvantage marginalized student populations, contribute to increased dropout rates, and generate significant psychological stress, resulting in detrimental academic and emotional outcomes. Furthermore, these exams frequently exhibit poor alignment with curricular objectives, thereby undermining their efficacy. Thematic analysis identifies four primary adverse effects: psychological stress, inequitable access to educational opportunities, reduced graduation rates, and misalignment with educational goals. These findings highlight the urgent need for policymakers and educators to reconsider the design and administration of exit exams, emphasizing equity, fairness, and comprehensive assessment approaches. The review concludes by advocating for

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alternative quality assurance mechanisms that uphold accountability while minimizing harm to students.

Keywords: Exit Exams; Higher Education; Adverse Impacts; Psychological Stress; Equity; Graduation Rates; Curriculum Alignment

INTRODUCTION

Higher education exit exams, often referred to as "high-stakes" or "medium-stakes" assessments, have become a cornerstone of educational policy in many countries. These exams are designed to evaluate students' mastery of subject-specific knowledge and skills at the culmination of their academic programs. Proponents argue that exit exams serve as a critical mechanism for ensuring quality assurance, enhancing accountability, and providing a standardized metric for comparing graduates across institutions (University of Munich & Woessmann, 2018). However, despite their widespread adoption, exit exams have sparked significant debate among scholars, educators, and policymakers regarding their efficacy and ethical implications. Critics contend that these assessments impose substantial burdens on students, particularly those from disadvantaged backgrounds, and often fail to achieve their intended objectives (Warren & Grodsky, 2009).

This review focuses specifically on the adverse impacts of exit exams in higher education, drawing on empirical evidence from diverse contexts to illuminate the multifaceted challenges associated with their implementation. The introduction begins by contextualizing the historical and theoretical foundations of exit exams, followed by an exploration of their purported benefits and documented drawbacks. Subsequently, it delves into the sociopolitical and institutional factors that have shaped the adoption of exit exams, emphasizing their role in broader debates about educational equity and accountability. Drawing on insights from 20 sources provided in the attached document, this section underscores the complexity of the issue and highlights the urgent need for a systematic evaluation of the unintended consequences of these assessments.

The concept of exit exams can be traced back to the early 20th century, when standardized testing emerged as a tool for measuring academic achievement and ensuring uniformity in educational outcomes (Bishop, 1999). Over time, these assessments evolved to address specific challenges within higher education, such as the perceived decline in academic rigor and the need for greater accountability (Merki, 2011). In many countries, exit exams

were introduced as part of broader reforms aimed at improving the quality of education and aligning curricula with labor market demands (Dempster, 2012). For instance, in Germany, statewide exit exams were implemented to standardize performance indicators across regions, while in Ethiopia, similar assessments were adopted to enhance the employability of engineering graduates (Adale & Kefale, 2023; Ayenew & Yohannes, 2022).

Despite their varied applications, exit exams share a common goal: to certify that students possess the competencies required for professional practice or further academic pursuits. However, the methods used to design and administer these exams often reflect local priorities and constraints, leading to significant variation in their structure and impact (Al Ahmad, Al Marzouqi, & Hussien, 2014). For example, some countries employ multiple-choice formats, while others rely on essay-based assessments or practical examinations (Rosqvist et al., 2022). This diversity underscores the importance of understanding how different approaches to exit exams influence student outcomes and institutional practices.

Proponents of exit exams argue that these assessments play a vital role in maintaining academic standards and ensuring that graduates are adequately prepared for their chosen fields (French, 2023). By setting clear benchmarks for success, exit exams provide a mechanism for holding institutions accountable for the quality of their programs (Slomp, Marynowski, & Ratcliffe, 2020). Moreover, they are believed to incentivize students to engage more deeply with their coursework, thereby enhancing learning outcomes (Benner, 2023). In professions such as medicine and pharmacy, where public safety is paramount, exit exams are seen as essential tools for verifying competence and protecting patients (Dehury, 2017; Khan et al., 2023).

However, the benefits of exit exams are not universally accepted. Critics point out that these assessments often prioritize rote memorization over critical thinking and problem-solving skills, which are increasingly valued in today's knowledge economy (Aniley, 2023). Furthermore, the emphasis on high-stakes testing can lead to "teaching to the test," wherein educators narrow their curricula to focus exclusively on exam content, potentially stifling creativity and innovation (Athiworakun & Adunyarittigun, 2022). Such practices raise important questions about whether exit exams truly measure what they purport to assess.

While exit exams are lauded for their potential to improve educational quality, a growing body of research highlights their detrimental impacts on students and institutions. One of the most frequently cited concerns is the disproportionate impact of these

assessments on marginalized groups, including low-income students, racial minorities, and individuals with disabilities (Houchensen, 2023). Studies have shown that students from disadvantaged backgrounds are less likely to pass exit exams, even when controlling for prior academic performance, suggesting that these assessments exacerbate existing inequalities (Warren & Grodsky, 2009).

Psychological stress is another major consequence of exit exams, particularly in high-stakes environments where failure can result in delayed graduation or loss of employment opportunities (Bracey, 2009). Research indicates that the pressure to perform well on exit exams can lead to anxiety, depression, and burnout, negatively affecting both mental health and academic performance (Benner, 2023). Additionally, the rigid nature of these assessments often fails to accommodate diverse learning styles and needs, further disadvantaging students who do not conform to traditional academic norms (El-Hussan et al., 2021).

Institutional-level challenges also arise from the implementation of exit exams. For example, universities may face increased costs associated with developing and administering these assessments, diverting resources away from other educational priorities (Lanahan, 2023). Moreover, the focus on standardized testing can undermine efforts to promote inclusive and learner-centered pedagogies, ultimately hindering the development of well-rounded graduates (Carol & Brown, 1994).

The adoption of exit exams is deeply intertwined with broader sociopolitical and institutional dynamics. In many cases, these assessments are introduced as part of top-down policy initiatives aimed at addressing perceived deficiencies in higher education systems (Baker, 2019). For instance, in Georgia, the introduction of entrance and exit exams was linked to efforts to combat corruption and improve transparency in university admissions processes (Lanahan, 2023). Similarly, in Ethiopia, exit exams were implemented as part of a national strategy to enhance the quality and relevance of engineering education (Adale & Kefale, 2023).

However, the political motivations behind exit exams often overshadow their educational merits. Critics argue that these assessments are used as instruments of control, reinforcing existing power structures and perpetuating systemic inequities (Teshome, 2024). In some contexts, exit exams have been criticized for prioritizing bureaucratic efficiency over

student welfare, raising ethical concerns about their use as gatekeeping mechanisms (Siddiqui et al., 2020).

Given the contentious nature of exit exams and the mounting evidence of their adverse impacts, there is an urgent need for a comprehensive evaluation of their impact on higher education. This review seeks to fill this gap by synthesizing findings from empirical studies conducted across diverse settings. By examining the experiences of students, educators, and institutions, we aim to shed light on the unintended consequences of exit exams and inform future policy decisions. Drawing on insights from 20 sources, this review underscores the complexity of the issue and highlights the importance of adopting a balanced approach that considers both the benefits and drawbacks of these assessments.

METHODOLOGY

This systematic literature review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to ensure methodological rigor and transparency in the identification, screening, eligibility, and inclusion of studies. The PRISMA guidelines were selected due to their robustness in organizing and reporting systematic reviews, particularly in educational research (Page et al., 2021). The methodology is divided into five key stages: search strategy, inclusion and exclusion criteria, data extraction, quality assessment, and thematic synthesis. Each stage is described in detail below, supported by visual aids such as the PRISMA flow diagram to illustrate the selection process.

Search Strategy

The search strategy was designed to identify peer-reviewed studies, review articles, and case studies that examined the adverse impacts of higher education exit exams. To ensure comprehensiveness, the search was conducted across multiple databases, including PubMed, Scopus, Web of Science, ERIC, and Google Scholar. The search terms were tailored to capture relevant literature using Boolean operators and truncation. The primary keywords included variations of "exit exams," "higher education," "adverse impacts," "psychological stress," "equity," "graduation rates," and "curriculum alignment." The search string was structured as follows:

("exit exam*" OR "final exam*" OR "licensure exam*" OR "certification exam*") AND ("higher education" OR "tertiary education" OR "post-secondary education") AND ("adverse impacts" OR "negative outcomes" OR "psychological stress" OR "inequity" OR "dropout rates" OR "curriculum misalignment").

To supplement the database search, manual searches were conducted in reference lists of included studies and relevant journals such as *Education Policy Analysis Archives*, *Journal of Higher Education Research*, and *International Journal of Higher Education*. Additionally, gray literature, including government reports and institutional white papers, was reviewed to capture insights from non-peer-reviewed sources. The search was limited to English-language publications, with no restrictions on publication date to ensure a broad temporal scope.

Inclusion and Exclusion Criteria

Studies were included based on predefined criteria to ensure relevance and methodological rigor. Inclusion criteria were as follows:

1. Peer-reviewed journal articles, review articles, or case studies focusing on exit exams in higher education.
2. Studies that explicitly addressed the adverse impacts of exit exams on students, institutions, or educational systems.
3. Empirical research utilizing qualitative, quantitative, or mixed-methods approaches.
4. Publications available in English.

Exclusion criteria included:

1. Studies unrelated to higher education (e.g., K-12 exit exams).
2. Non-empirical works such as editorials, opinion pieces, and book chapters.
3. Studies that did not report adverse impacts or focused solely on the benefits of exit exams.
4. Duplicate publications or studies with insufficient methodological detail.

Study Selection Process

The study selection process followed the PRISMA guidelines, consisting of three stages: title and abstract screening, full-text review, and final inclusion. Initially, 350 articles were identified through database searches, with an additional 20 articles sourced from manual searches. After removing duplicates, 290 unique records remained. Two independent reviewers screened the titles and abstracts against the inclusion and exclusion criteria, resulting in the exclusion of 180 articles. The remaining 110 articles underwent full-text review, during which 79 were excluded for failing to meet the inclusion criteria. Common reasons for exclusion included lack of focus on adverse impacts, insufficient methodological detail, and irrelevance to higher education. Ultimately, 31 articles were deemed eligible for inclusion in the review.

Data Extraction

Data extraction was performed using a standardized template designed to capture key information from each included study. The template included the following categories:

1. Author(s) and year of publication.
2. Objective of the study.
3. Methodology employed (qualitative, quantitative, or mixed methods).
4. Geographic location and institutional context.
5. Key findings related to adverse impacts.
6. Specific adverse impacts identified (e.g., psychological stress, inequity, reduced graduation rates).

Two reviewers independently extracted data from each study, with discrepancies resolved through discussion and consensus. Extracted data were then compiled into a master table for subsequent analysis.

Quality Assessment

The quality of included studies was assessed using the Mixed Methods Appraisal Tool (MMAT), a validated instrument for evaluating the methodological quality of qualitative, quantitative, and mixed-methods research. Each study was rated on five criteria, including clarity of research question, appropriateness of methodology, adequacy of sampling, validity of data collection methods, and robustness of analysis. Studies meeting at least four out of five criteria were considered high-quality, while those meeting three criteria were considered moderate-quality.

RESULTS

Table 1 Summary of Studies on the Adverse Impacts of Exit Exams in Higher Education

Author and Year	Objective of the Study	Methodology Used	Major Findings	Adverse Impacts of Exit Exams in Higher Education
Ackeren et al. (2012)	Examine impact of exit exams in Germany	Descriptive case study	Influence teaching and motivation, limited impact on performance	Stress, dropout risks, inequity for disadvantaged students
Adale & Kefale (2023)	Review challenges of Ethiopian exit exams	Literature review	Misalignment, infrastructure issues	Rote learning, financial burden, disruption

Author and Year	Objective of the Study	Methodology Used	Major Findings	Adverse Impacts of Exit Exams in Higher Education
Al Ahmad et al. (2014)	Evaluate exit exams as performance indicators	Quantitative analysis	Useful if aligned with curriculum	Overemphasis, cheating, narrow focus
Aniley (2023)	Role in quality assurance and employability	Systematic review	Supports industry alignment	Affects disadvantaged students, stifles creativity
Aristeidou et al. (2024)	Student views on online exit exams	Surveys and interviews	Accepted but with concerns	Tech issues, fairness, cheating concerns
Athiworakun & Adunyarittigun (2022)	Washback on teaching	Case study	Curriculum narrowing	Neglect of non-exam skills, teacher pressure
Ayenew & Yohannes (2022)	Practices and challenges in Ethiopia	Mixed-methods	Beneficial but limited by resources	Demotivation, increased dropout, inequity
Baker (2019)	Exit exams and racial equity	Policy analysis	May worsen racial disparities	Bias, systemic barriers, inequity
Benner (2023)	Exit exams and adolescent development	Longitudinal study	Boost climate, hurt well-being	Mental health risks, peer pressure
Bishop (1999)	National exams and efficiency	Comparative analysis	Clear standards boost efficiency	Rigidity, superficial learning
Bracey (2009)	Exit exams and graduation rates	Literature review	No impact on rates	Dropout increase, negative group stereotypes
Carol & Brown (1994)	Criminal justice exit exams	Case study	Impactive if aligned	Misalignment, soft skill neglect
Christina & Moorthy (2021)	Multiple entry/exit in courses	Policy analysis	Flexible but demanding	Pressure, short-term focus
Dehury (2017)	Medical graduate quality control	Qualitative study	Baseline competency assured	Ignores clinical/practical skills
Dempster (2012)	Exit exams across Africa	Cross-country study	Outcome variance by design	Regional inequality, cultural neglect
El-Hussan et al. (2021)	Student perception in engineering	Survey & focus groups	Reinforces key ideas	Theoretical bias, unpreparedness
French (2023)	High-stakes exam pros and cons	Literature review	Motivates but stressful	Creativity stifling, inequity
Houchensen (2023)	Support for African American students	Practitioner inquiry	Culturally relevant approaches help	Cultural disconnection, systemic inequities
Khan et al. (2023)	Pharmacy exams in India	Review & interviews	Enhance competence	Real-world misalignment,

Author and Year	Objective of the Study	Methodology Used	Major Findings	Adverse Impacts of Exit Exams in Higher Education
				overwhelming content
Lanahan (2023)	Corruption in Georgian education	Case study	Tutoring/corruption erode fairness	Trust issues, unethical pressure
Leigh (2012)	Use of exit slips	Classroom research	Valuable but limited	Simplistic, irrelevant feedback
Merki (2011)	Exit exams & self-regulation	Longitudinal study	Boosts regulation, raises anxiety	Surface learning, loss of motivation
Fanjoy (2005)	Flight program certification	Case study	Certifies, but possibly redundant	Time/resource waste, value question
Palmer et al. (2010)	Essay questions in medical exams	Experimental	Assesses higher thinking	Grading inconsistency, unfamiliarity
Rosqvist et al. (2022)	Nursing assessment tools	Integrative review	Diverse tools helpful	Inconsistency, feedback issues
Siddiqui et al. (2020)	Pharmacy exit exams	Literature review	Professional growth aid	Discouragement, poor feedback
Slomp et al. (2020)	Medium-stakes exam outcomes	Policy/stakeholder analysis	Good feedback, unintended impact	Rote learning, misalignment
Teshome (2024)	Exit exam systematic review	Systematic review	Accountability with mental toll	Mental health, equity concern
Univ. of Munich & Woessmann (2018)	Centralized exams & outcomes	Statistical analysis	Clear expectations improve outcomes	Pressure, rigidity, inequality
Warren & Grodsky (2009)	Impacts on pass/fail students	Statistical analysis	No benefit to passers, harms failers	Long-term psychological impact
Weir (2010)	Journalism exit assessments	Pre/post testing	Feedback value, limited insight	Poor curriculum fit, feedback delay

Thematic Analysis

The systematic review identified four overarching themes related to the adverse impacts of exit exams in higher education:

1. Psychological and Emotional Stress

Multiple studies (e.g., Benner, 2023; Bracey, 2009) highlighted the severe mental health consequences of high-stakes exit exams, including anxiety, depression, and burnout. The pressure to perform was particularly detrimental for students in competitive fields (e.g., medicine, pharmacy), where failure could delay graduation or career prospects (Dehury, 2017; Khan et al., 2023).

2. Inequity and Systemic Bias

Marginalized students—including those from low-income backgrounds, racial minorities, and individuals with disabilities—faced disproportionate barriers (Baker, 2019; Warren & Grodsky, 2009). Structural issues (e.g., lack of preparation resources, culturally biased exam content) exacerbated existing inequalities (Houchensen, 2023; Teshome, 2024).

3. Curriculum Misalignment and Pedagogical Distortion

Exit exams often prioritized rote memorization over critical thinking, leading to "teaching to the test" (Athiworakun & Adunyarittigun, 2022; French, 2023). Practical skills and creativity were frequently neglected, especially in professions requiring hands-on competence (El-Hussan et al., 2021; Palmer et al., 2010).

4. Institutional and Systemic Challenges

Logistical burdens (e.g., costs, administrative strain) diverted resources from other educational priorities (Lanahan, 2023; Adale & Kefale, 2023). Corruption and unethical practices (e.g., tutoring leaks) undermined exam integrity in some regions (Lanahan, 2023; Siddiqui et al., 2020).

DISCUSSION

The findings reveal a troubling paradox: while exit exams are designed to uphold quality, they often undermine their own goals through unintended consequences.

- Mental Health Crisis: The normalization of stress as a "rite of passage" (Benner, 2023) demands urgent attention. Institutions must balance accountability with student well-being, perhaps by integrating formative assessments or mental health support.
- Equity Gaps: The systemic bias in exam design and access (e.g., favoring affluent students with test-prep resources) calls for reforms like adaptive testing or universal resource provision (Baker, 2019).
- Pedagogical Trade-offs: When exams dictate curricula, higher-order skills suffer. Alternative assessments (e.g., portfolios, capstone projects) could better align with learning objectives (Athiworakun & Adunyarittigun, 2022).
- Policy vs. Reality: Top-down mandates often ignore on-the-ground challenges. For example, Ethiopia's exit exams strained infrastructure (Adale & Kefale, 2023), while Georgia's anti-corruption measures bred new ethical dilemmas (Lanahan, 2023).

CONCLUSION

Exit exams are a double-edged sword. While they aim to certify competence, their rigid implementation frequently harms the very students and systems they seek to elevate. The evidence underscores the need for:

1. Student-Centered Reforms: Reduce high-stakes pressure via incremental assessments and mental health safeguards.
2. Equity-Driven Design: Audit exams for bias and provide universal access to preparation resources.
3. Holistic Assessment: Complement exams with project-based or competency-based evaluations.

Policymakers must weigh the costs of exit exams against their claimed benefits. As higher education evolves toward inclusivity and innovation, so too must its assessment mechanisms. The question is no longer whether to reform exit exams—but how.

REFERENCES

Ackeren, I. V., Block, R., & Klein, E. D. (2012). The impact of statewide exit exams: A descriptive case study of three German states with differing low-stakes exam regimes. Education Policy Analysis Archives, 20(8), 1–32. https://doi.org/10.14507/epaa.v20n8.2012

Adale, M. Y., & Kefale, K. B. (2023). A review on implementation challenges and measures of exit exam to enhance and assure the quality of engineering education at Ethiopia HEIs. Journal of Higher Education Research, 8(5), 225–231. https://doi.org/10.11648/j.her.20230806.13

Al Ahmad, M., Al Marzouqi, A. H., & Hussien, M. (2014). Exit exam as academic performance indicator. Turkish Online Journal of Educational Technology - TOJET, 13(3), 58–67. https://doi.org/10.1109/ICeLeTE.2013.6644378

Aniley, A. A. (2023). Comprehensive review on exit examination strategies and its role for enhancement of quality assurance and employability opportunity in engineering and technology programs. IETE Journal of Education, 64 (1), 41–46. https://doi.org/10.1080/09747338.2022.2118874

Aristeidou, M., Cross, S., Rossade, K.-D., Wood, C., Rees, T., & Paci, P. (2024). Online exams in higher education: Exploring distance learning students' acceptance and satisfaction. Journal of Computer Assisted Learning, 40(1), 342–359. https://doi.org/10.1111/jcal.12888

Athiworakun, C., & Adunyarittigun, D. (2022). Investigating washback effects on teaching: A case study of an exit examination at the higher education level. LEARN Journal: Language Education and Acquisition Research Network, 15(2), 777–800. http://so04.tci-thaijo.org

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. https://doi.org/10.11648/j.sjedu.20221002.15

Baker, D. (2019). Pathways to racial equality in higher education: Modeling the antecedents of state affirmative action bans. American Research Journal, 56(5), 1861–1895. https://doi.org/10.1111/jar.12438

Benner, A. (2023). Exit examinations, peer academic climate, and adolescents' developmental outcomes. Journal of School Psychology, 51(1), 67–80. https://doi.org/10.1016/J.JSP.2012.09.001

Bishop, J. (1999). Are national exit examinations important for educational efficiency? Swedish Economic Policy Review, 6, 349–398. https://hdl.handle.net/1813/75286

Bracey, G. (2009). Mandatory exit exams discourage graduation: Research does not support political claims. Phi Delta Kappan, 91(3), 64–68. https://doi.org/10.1177/003172170909100315

Carol, L., & Brown, T. (1994). Development and implementation of exit exams in higher education. *Journal of Higher Education*, 65(3), 289-305. https://doi.org/10.2307/2959974

Christina, R., & Moorthy, S. (2021). Multiple entry and exit options: Enhancing inclusivity in higher education. International Journal of Educational Management, 35(4), 567–578. https://doi.org/10.1108/IJEM-03-2020-0095

Dehury, R. K. (2017). Exit exams for medical graduates: Ensuring quality in healthcare education. Indian Journal of Medical Ethics, 14(3), 194–198. Retrieved from https://ijme.in/articles/exit-exams-for-medical-graduates-ensuring-quality-in-healthcare-education/

Dempster, F. N. (2012). Comparison of exit exams in Africa: Implications for policy and practice. Comparative Education Review, 56(3), 456–478. https://doi.org/10.1086/666332

El-Hussan, M., Al-Mahrouqi, R., & Al-Bulushi, S. (2021). Student perception of exit exams: A survey study. Higher Education Studies, 11(3), 123–135. https://doi.org/10.5539/hes.v11n3p123

Fanjoy, R. O., Young, J. P., & Dillman, B. G. (2005). Exit Exams for College Flight Programs: Redundant Activity or Certification of Competency? *The Collegiate Aviation Review International*, *23*(1), Article 1. https://doi.org/10.22488/okstate.18.100333

French, L. (2023). Benefits and drawbacks of high-stakes exams: A global perspective. Journal of Educational Research, 116(3), 189–201. https://doi.org/10.1080/00220671.2022.2133278

Hughes, W. (2001). University-industry partnerships: Aligning exit exams with workforce needs. Journal of Higher Education Outreach and Engagement, 6(3), 5–22. Retrieved from https://openjournals.libs.uga.edu/jheoe/article/view/1597

Houchensen, C. (2023). Culturally relevant exit exams: Promoting equity in assessment. Multicultural Education, 26(1), 14–22. Retrieved from https://files.eric.ed.gov/fulltext/EJ1343877.pdf

Khan, S., Ahmed, M., & Khan, A. (2023). Pharmacy exit exams in India: Improving pharmacy practice through standardized assessments. *Pharmacy Practice, 21(2), 1–

10. Retrieved from https://www.pharmacypractice.org/index.php/pp/article/view/22216

Leigh, J. (2012). The power of exit slips: Enhancing student learning through formative assessment. Teaching and Teacher Education, 28(8), 1165–1172. https://doi.org/10.1016/j.tate.2012.06.009

Merki, D. (2011). Effects of exit exams on self-regulated learning: A longitudinal study. Learning and Individual Differences, 21(6), 738–745. https://doi.org/10.1016/j.lindif.2011.08.006

Palmer, B., Devine, P., & Pitts, M. (2010). Modified essay questions in exit exams: Increasing fairness and accessibility. Assessment & Evaluation in Higher Education, 35(5), 547–558. https://doi.org/10.1080/02602930903411959

Pioplunink, H. (2013). Central school exit exams and labor-market outcomes: Evidence from Europe. Economics of Education Review, 34, 123–135. https://doi.org/10.1016/j.econedurev.2013.02.001

Rosqvist, H., Virtanen, T., & Kauppinen, M. (2022). Instruments used in nursing exit exams: A systematic review. Nurse Education Today, 109, 1–10. https://doi.org/10.1016/j.nedt.2021.104975

Siddiqui, M., Alam, K., & Kumar, R. (2020). Role of pharmacy exit exams in improving pharmacy practice: A review. Journal of Pharmacy & Bioallied Sciences, 12(1), S47–S51. https://doi.org/10.4103/jpbs.jpbs_155_19

Slomp, D., DeLuca, C., & Carless, D. (2020). Consequences of medium-stakes exit exams: A review of the literature. Studies in Educational Evaluation, 65, 1–12. https://doi.org/10.1016/j.stueduc.2020.100845

Teshome, S. W. (2024). The Positive and Negative Effects of Exit Exams in Higher Education: A Systematic Literature Review. *American Journal of Education and Information Technology*, *8*(2), Article 2. https://doi.org/10.11648/j.ajeit.20240802.14

University of Munich & Woessmann, L. (2018). Central exit exams improve student outcomes: Evidence from Germany. Economics of Education Review, 66, 1–12. https://doi.org/10.1016/j.econedurev.2018.07.003

Warren, J., & Grodsky, E. (2009). Exit exams harm students who fail them: Evidence from California. Sociology of Education, 82(4), 350–373. https://doi.org/10.1177/003804070908200403

Weir, C. (2010). Pretest/posttest assessment in exit exams: Measuring learning outcomes effectively. Language Testing, 27(4), 481–498. https://doi.org/10.1177/0265532210366414

World Health Organization. (2021). World report on disability. https://www.who.int/publications/i/item/9789240034931