

Generative AI in University Writing Instruction: A Cross-Cultural Study of Turkish and Egyptian Students

Elif Demir^{1,*} and Omar El-Sayed²

¹Boğaziçi University, Turkey

²Cairo University, Egypt

E-mail: elif.demir@mock.iccmets.test; omar.el.sayed@mock.iccmets.test

Abstract.

Generative artificial intelligence tools have entered university writing instruction faster than institutional policy has been able to respond, and the ways in which students use them are shaped by cultural and institutional context as well as by the technology itself. This paper compares how undergraduate students in Turkey and Egypt use generative AI tools in academic writing and how instructors adapt assessment in response. The study employed a sequential mixed-methods design combining a questionnaire survey of 480 undergraduate students, 246 at a Turkish university and 234 at an Egyptian university, with eight focus groups involving 52 of the surveyed students and interviews with 16 writing instructors. Survey and focus-group data from 480 students reveal distinct usage norms in the two settings. Turkish students reported more frequent use for drafting and structural planning and were more likely to disclose use to instructors, whereas Egyptian students reported greater use for language correction and translation and were more cautious about disclosure, reflecting differences in institutional signals and perceived sanctions. Despite these differences, students in both countries expressed a shared demand for transparent AI-use policies that specify permitted and prohibited uses at the level of individual assignments. Instructors in both settings had shifted towards process-based, in-class and oral assessment but reported limited institutional guidance. The paper argues that assessment adaptation and policy transparency are complementary and offers recommendations for institutions in comparable contexts seeking to integrate generative AI into writing instruction without undermining learning or academic integrity.

Keywords: generative AI, academic writing, assessment, cross-cultural comparison, higher education policy

**Corresponding author: elif.demir@mock.iccmets.test*

1. Introduction

The public release of large language model applications from late 2022 onwards has transformed the conditions under which academic writing is taught and assessed in higher education. Tools capable of generating fluent prose, summarising sources, restructuring arguments and correcting grammar are now available to any student with an internet connection, in many cases without charge. Universities have responded in varied and sometimes contradictory ways, ranging from outright prohibition to enthusiastic integration, and in many institutions the practical response has been left to individual instructors. Students, meanwhile, have developed their own norms of use, often in the absence of clear guidance and with uncertainty about what is permitted.

Writing instruction is a particularly sensitive domain because the production of text is both the object of learning and the principal means of assessment. When the text can be generated by a machine, the traditional essay loses much of its value as evidence of student

learning, and instructors face the question of how to assess writing skill in a way that remains valid. At the same time, generative AI tools offer genuine affordances for learners, especially those writing in a second language, who may benefit from feedback, models and language support that instructors cannot provide at scale. The tension between integrity and affordance is not resolved by technology and depends on how institutions, instructors and students negotiate new practices.

Most published research on student use of generative AI derives from English-speaking countries, and little is known about how usage norms and assessment adaptation vary across contexts. Turkey and Egypt provide an instructive comparison: both are large systems with widespread English-medium instruction and young, digitally connected students, and both have regulators that have issued general statements on AI without detailed guidance, yet they differ in institutional culture, in the prevalence of high-stakes examination and in instructor autonomy. This paper compares student use and instructor adaptation in the two countries, drawing on survey and focus-group data from 480 students and interviews with instructors, to identify both context-specific patterns and shared concerns that can inform policy.

2. Literature Review

2.1 Generative AI in academic writing

Early reviews of generative AI in higher education identified opportunities, including personalised feedback, language support and automation of routine tasks, alongside risks of misconduct, over-reliance, inaccuracy and bias (Kasneci et al., 2023). In writing, Warschauer et al. (2023) argue that for second-language writers AI can scaffold fluency and confidence provided students learn to evaluate and revise generated text critically, while others worry that outsourcing drafting deprives students of the cognitive work through which writing develops thinking.

Surveys since 2023 consistently find high adoption, with a majority of students using generative AI for academic tasks for purposes ranging from brainstorming and outlining through drafting to language correction and translation (Chan & Hu, 2023). Students frequently report uncertainty about what is permitted and a desire for clearer guidance, and Chan and Hu (2023) found that they valued availability and personalised support but were concerned about accuracy, ethics and their own skill development.

2.2 Assessment adaptation and academic integrity

Bearman et al. (2023) argue that generative AI exposes the limitations of assessments relying on unsupervised text production and call for a shift towards assessing process, judgement and critical work with AI, through in-class writing, oral examinations, portfolios of drafts, critiques of AI output and explicit declarations of use. Cotton et al. (2024) note that detection tools are unreliable and can generate false accusations, particularly against non-native writers, so that detection-based policies are unsustainable. Perkins (2023) argues for policies that acknowledge legitimate language support for English-as-an-additional-language students while distinguishing it from content generation.

Academic integrity is itself culturally variable. Conceptions of authorship, the acceptability of collaboration and the seriousness of textual borrowing differ across educational traditions (Pecorari & Petrić, 2014), and these differences are likely to shape how students interpret generative AI use and how instructors respond.

2.3 Technology acceptance and institutional context

The technology acceptance model (Davis, 1989) and the unified theory of acceptance and use of technology (Venkatesh et al., 2003) explain adoption through perceived usefulness, ease of use, social influence and facilitating conditions. For generative AI in writing, the signals sent by instructors and institutions and the perceived consequences of detection shape not only whether students use the tools but how, and whether they disclose. Cultural dimensions such as uncertainty avoidance and power distance suggest that students in different settings may respond differently to ambiguous rules, some seeking permission and others avoiding disclosure (Hofstede et al., 2010).

3. Methodology

3.1 Research design and settings

The study employed an explanatory sequential mixed-methods design (Creswell & Plano Clark, 2018), in which a questionnaire survey was followed by focus groups with students and interviews with instructors to interpret and elaborate the survey findings. The research was conducted at one large public research university in each country, both of which offer English-medium undergraduate programmes across humanities, social sciences, engineering and natural sciences and require first-year and upper-level academic writing courses. At the time of data collection neither university had issued a detailed institutional policy on generative AI in coursework; both had circulated general statements referring to existing academic integrity regulations.

3.2 Participants and data collection

The survey was administered online to undergraduate students enrolled in academic writing courses during the spring semester of 2025. Invitations were distributed through course platforms with the cooperation of instructors. A total of 480 usable responses were obtained, 246 from the Turkish university and 234 from the Egyptian university, from approximately 1,150 invited students, a response rate of 41.7 per cent. Table 1 presents the profile of respondents. The questionnaire, available in English, Turkish and Arabic, covered frequency of generative AI use, purposes of use in writing tasks, disclosure to instructors, perceived permissibility, attitudes towards AI and learning, and preferences regarding institutional policy. Items on purposes and attitudes were adapted from Chan and Hu (2023) and rated on five-point scales; the attitude scales showed Cronbach's alpha values of 0.81 and 0.84 in the two samples.

Table 1: Profile of survey respondents (N = 480)

Characteristic	Category	Turkey (n = 246)	Egypt (n = 234)	Total (N = 480)
Gender	Female (%)	55.7	51.3	53.5
	Male (%)	44.3	48.7	46.5
Year of study	First or second year (%)	58.1	62.4	60.2
	Third year or above (%)	41.9	37.6	39.8
Field	Humanities and social sciences (%)	46.3	42.7	44.6
	Engineering and natural sciences (%)	53.7	57.3	55.4
Generative AI use	Any use for writing in past semester (%)	89.0	84.6	86.9

Weekly or more frequent use (%)	61.4	49.6	55.6
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Source: Authors' survey data (2025)

Eight focus groups, four at each university, were conducted with 52 students drawn from survey respondents who indicated willingness to participate, with groups composed to include both fields and both lower and upper years. Focus groups lasted between 60 and 80 minutes, were conducted in the local language or English according to participant preference, and explored how students decided when and how to use AI, how they interpreted instructor expectations, and what policies they would consider fair. Semi-structured interviews were conducted with 16 writing instructors, eight at each university, covering their observations of student use, changes they had made to assessment and their views on institutional guidance. All qualitative data were transcribed, translated where necessary and analysed thematically following Braun and Clarke (2006), with coding conducted independently by the two authors and reconciled through discussion.

3.3 Analysis

Survey data were analysed using descriptive statistics and chi-square tests for differences in proportions between the two countries, with independent-samples t-tests for scale scores. Thematic findings from focus groups and interviews were integrated with the survey results using a joint display approach, in which quantitative differences were paired with qualitative explanations. Ethical approval was obtained from both universities, and participants were assured that responses would not be shared with instructors or affect their grades, an assurance that focus-group participants indicated was important to their willingness to speak openly.

4. Results

4.1 Patterns of use

Use of generative AI for writing tasks was widespread in both settings, with 86.9 per cent of respondents reporting some use during the previous semester. The purposes of use, however, differed markedly, as shown in Table 2. Turkish students were significantly more likely to report using AI for generating outlines and structural planning and for drafting sections of text, whereas Egyptian students were significantly more likely to report using AI for correcting grammar and language and for translating between Arabic and English. Use for brainstorming topics and for summarising sources was common and did not differ significantly between the two groups. Focus-group discussions illuminated these patterns. Turkish students described AI as a means of overcoming the difficulty of beginning a piece of writing and of organising ideas, and several described a workflow in which they generated a skeleton and then rewrote it extensively. Egyptian students more often described composing in Arabic or in a mixture of Arabic and English and using AI to produce or polish an English version, reflecting greater anxiety about language accuracy in English-medium assessment.

Table 2: Purposes of generative AI use in academic writing and disclosure behaviour (% of respondents)

Item	Turkey (n = 246)	Egypt (n = 234)	χ^2	p
Brainstorming topics or ideas	72.0	68.4	0.74	0.389
Generating outlines or structure	63.8	44.9	17.32	< 0.001
Drafting sections of text	48.4	35.0	8.84	0.003
Summarising sources	58.9	55.1	0.71	0.399
Correcting grammar and language	54.5	76.9	26.65	< 0.001
Translating between languages	29.7	61.5	49.21	< 0.001

Disclosed AI use to instructor at least once	41.5	19.7	26.83	< 0.001
Believe instructors would penalise any use	31.3	57.3	32.86	< 0.001

Source: Authors' survey data (2025)

4.2 Disclosure and perceived sanctions

Disclosure of AI use to instructors differed sharply between the two settings. Turkish students were more than twice as likely as Egyptian students to have disclosed use at least once, and Egyptian students were far more likely to believe that instructors would penalise any use regardless of purpose. Focus-group participants in Egypt described an environment in which instructors rarely mentioned AI except in warnings, in which detection software was believed to be in use, and in which the safest course was silence. Several participants noted that the consequences of an integrity accusation were severe and that the burden of proof appeared to lie with the student. Turkish participants described a more varied environment in which some instructors explicitly permitted AI for specified purposes, others prohibited it, and many had not addressed the matter, and in which disclosure was more often possible without penalty. Even in Turkey, however, students expressed uncertainty about expectations that varied from course to course.

4.3 Attitudes and demand for policy

Mean scores on the attitude scales are reported in Table 3. Students in both countries agreed that AI tools were useful for writing and were concerned about the effect of over-reliance on their own skills, with no significant difference on either dimension. The most striking result was the strength and uniformity of demand for transparent policy. Over 85 per cent of respondents in both countries agreed or strongly agreed that their university should publish a clear policy specifying permitted and prohibited uses, and over 80 per cent agreed that expectations should be stated for each assignment rather than left to general regulations. Focus-group participants in both countries described the current situation as unfair because rules were unclear and inconsistently applied, and argued that a transparent policy would protect honest students as much as it would constrain misuse. Several Egyptian participants stated that they would disclose use if a policy made it safe to do so.

Table 3: Student attitudes and policy preferences (mean scores on 5-point scale, and % agreement)

Measure	Turkey (n = 246)	Egypt (n = 234)	Test statistic	p
Perceived usefulness of AI for writing (mean, $\alpha = 0.81/0.84$)	3.92	3.85	$t = 0.96$	0.338
Concern about over-reliance (mean)	3.41	3.53	$t = -1.43$	0.153
Perceived clarity of current rules (mean)	2.38	2.05	$t = 3.87$	< 0.001
University should publish clear AI policy (% agree)	86.6	88.5	$\chi^2 = 0.38$	0.536
Expectations should be set per assignment (% agree)	82.1	84.2	$\chi^2 = 0.37$	0.541
AI use should be permitted with disclosure (% agree)	74.4	70.1	$\chi^2 = 1.10$	0.294

Source: Authors' survey data (2025)

4.4 Instructor adaptation of assessment

Instructors in both universities reported that they had changed assessment practice in response to generative AI, but the direction and extent of change differed. Turkish instructors more frequently described process-based approaches, including staged submissions of outlines and drafts, reflective commentaries on how AI had been used, and assignments requiring students to critique AI-generated text. Egyptian instructors more frequently described increased reliance on in-class handwritten writing and oral examination, and a reduction in the weight of take-home essays. Instructors in both settings reported that they had received little institutional guidance, that they were uncertain about the reliability of detection software and reluctant to base accusations on it, and that they lacked time to redesign courses thoroughly. Several instructors in each country stated that they would welcome an institutional policy that they could reference in their syllabi, so that the burden of setting rules did not fall on them individually.

5. Discussion

5.1 Distinct usage norms

The findings confirm that student use of generative AI is widespread but context-shaped. Egyptian students' greater use for language correction and translation reflects the linguistic challenge of English-medium study, with AI functioning as the scaffolding described by Warschauer et al. (2023) and Perkins (2023); Turkish students' greater use for planning and drafting reflects a challenge of organising argument. Both uses are pedagogically ambiguous, since language correction and structural generation may each support or substitute for learning, so the appropriate response depends on what a course is trying to teach, supporting the assignment-level specification advocated by Bearman et al. (2023).

The differences in disclosure are consistent with the role of social influence and facilitating conditions (Venkatesh et al., 2003) and with the cultural dimensions discussed by Hofstede et al. (2010). Where signals were prohibitive and consequences severe, students concealed use; where signals were mixed, they were more open. Concealment prevents instructors from understanding how students work and turns a pedagogical question into policing, which the unreliability of detection noted by Cotton et al. (2024) makes especially problematic.

5.2 A shared demand for transparency

Despite these differences, the two populations were nearly identical in their demand for transparent policy, the study's most policy-relevant finding. Cultural variation lies in how students respond to ambiguity, not in what they want from institutions: students in both settings regarded clear, assignment-level rules as a matter of fairness and most would accept permitted use with disclosure, and instructors wanted policy they could apply. This points to an architecture in which the institution sets principles and a common vocabulary of permitted uses and instructors specify expectations per assignment, consistent with the broader literature (Kasneci et al., 2023; Chan & Hu, 2023) and addressing the cultural variability in integrity conceptions noted by Pecorari and Petrić (2014) by making expectations explicit.

Assessment adaptation and policy transparency are complementary. Process-based assessment, as adopted more widely in Turkey, makes AI use visible and reduces the incentive to conceal; in-class and oral assessment, as adopted more widely in Egypt, protects validity but narrows the skills assessed. A combination that retains extended writing while documenting process and permitting disclosed use for specified purposes best matches the

preferences of students and instructors, and students' reported usefulness and concern about over-reliance suggest receptiveness to instruction in critical use.

Three recommendations follow. Institutions should adopt a tiered vocabulary of AI use, distinguishing brainstorming, language editing, structural assistance and content generation, and require instructors to state which tiers each assignment permits. Disclosure should be a normal component of submission through a standard declaration rather than a confession. Instructors should receive exemplar assignments, rubrics that reward process and judgement, and time for redesign. None of these depends on detection technology.

6. Conclusion

This paper compared how undergraduate students in Turkey and Egypt use generative AI tools in academic writing and how instructors adapt assessment. Survey and focus-group data from 480 students revealed distinct usage norms: Turkish students made greater use of AI for planning and drafting and were more willing to disclose use, while Egyptian students made greater use of AI for language correction and translation and were more likely to conceal use in the expectation of penalties. Instructors in both settings had adapted assessment, towards process-based approaches in Turkey and towards in-class and oral formats in Egypt, but reported limited institutional guidance. Across both countries, students expressed a strong and uniform demand for transparent AI-use policies specified at the assignment level, and most were willing to accept permitted use with disclosure.

The study contributes cross-cultural evidence to a literature dominated by Anglophone contexts and shows that while the practices surrounding generative AI vary, the desire for clarity does not. Its limitations include reliance on self-reported use, which may be affected by the very concealment the study documents; the inclusion of a single university in each country, which limits generalisation to other institutions; and a cross-sectional design that cannot capture how norms evolve as policies are introduced. Future research should evaluate the effects of specific policy and assessment interventions on student use, disclosure and writing outcomes, extend the comparison to additional countries and institution types, and examine how instructors can be supported to redesign assessment in ways that preserve the development of writing as thinking.

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