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Transformative Actions from Learning Assessment: A Cross-Context Typology, Coding Protocol, and Baseline Evidence from a Public University

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Abstract

Institutions often collect abundant evidence of student learning yet struggle to translate it into meaningful change. This article addresses that gap by introducing a portable typology and transparent coding protocol for classifying "transformative actions" that emerge from learning assessment and lead to pedagogical, curricular, and student-support improvements. Using qualitative content analysis of records from an online assessment system and institutional dashboards at a large public university in the Caribbean, we compiled and coded 213 documented actions reported by graduate and undergraduate programs during 2022-2025. Nearly half of the actions involved course-level pedagogical modifications (43%), while formal curricular changes were rare (2%). A substantial share lacked sufficient descriptive detail to classify (31%), indicating a documentation challenge that can undermine institutional learning from assessment. We also observed emerging student-led initiatives and meta-assessment practices focused on improving rubrics, calibration, and feedback cycles. Beyond reporting distributions, the article contributes (a) a cross-context typology with coding rules and examples, (b) a reproducible template for program-level reporting and follow-up, and (c) baseline indicators to monitor progress in closing the assessment-to-action loop over time. We discuss implications for moving

from compliance to improvement, strengthening the linkage between evidence and decision-making, and scaling effective practices to the curricular level.

Keywords: Student learning assessment, institutional change, meta-assessment, baseline analysis, public university

Introduction

Across higher education systems, institutions amass extensive evidence of student learning yet often struggle to convert that evidence into timely, scalable, and well-documented improvements. Scholarship has urged a shift from compliance-oriented reporting toward an "Assessment 3.0" ethos centered on usefulness, equity, and continuous improvement (Ewell, 2018; Hutchings, Kinzie, & Kuh, 2019; Montenegro & Jankowski, 2020). Still, two gaps persist internationally: first, the lack of a portable, theory-informed typology to classify the concrete improvement steps that follow assessment; second, the absence of transparent coding rules that make those steps comparable across programs and institutions over time. Related literatures - on rubric quality and consequences (Jonsson & Svingby, 2007; Fraile, Gil Izquierdo, & Medina, 2023), on using evidence for improvement (Kinzie, 2015), and on the state of outcomes assessment (Kuh, Jankowski, Ikenberry, & Kinzie, 2013) - rarely specify how to document, code, and track the actions themselves with sufficient fidelity for institutional learning and cross-context synthesis.

This article addresses those gaps by proposing a cross-context typology and explicit coding protocol for transformative actions (TAs) - pedagogical, curricular, advising, student-support, and meta-assessment steps taken in response to evidence of student learning. We ground the protocol in a multi-source corpus compiled from an online assessment system and institutional dashboards at a large public university, then test its clarity and portability through a baseline analysis of program-reported TAs. The corpus includes descriptions of pedagogical, curricular, administrative, and student-led interventions reported as responses to assessment findings and extracted with a documented procedure for program and level (undergraduate/graduate).

The empirical case demonstrates both the promise and the fragility of the assessment-to-action loop. In a dataset of 213 documented actions, nearly half concern course-level teaching adjustments (43%), while only a small fraction are formal curricular changes (2%); moreover, 31% lack sufficient detail to classify - an under-documentation problem that can thwart organizational learning from assessment. These patterns motivate the need

for shared typologies, clearer reporting prompts, and meta-assessment routines that ensure specificity and follow-up.

We situate the case within a broader institutional cycle that requires programs not only to plan actions grounded in evidence but also to track and report their implementation and results using standardized annexes. This policy architecture - mirrored in many systems worldwide - creates an opportune setting to operationalize typologies and coding rules that make actions auditable, comparable, and learnable across units and years.

Methodologically, we adopt a qualitative, interpretive design consistent with guidance in mixed-methods and qualitative traditions (Creswell & Creswell, 2018; Creswell & Poth, 2018; Strauss & Corbin, 2015), treating counts as descriptive aids rather than inferential claims. The multi-source strategy (online system + dashboards) enhances credibility and preserves contextual meaning, offering a robust basis for institutional learning about which actions are feasible, which scale, and which require policy support.

The article offers: (a) a cross-context typology of TAs aligned with current debates on improvement-oriented assessment (Ewell, 2018; Jankowski, 2017); (b) a coding protocol with decision rules and examples to improve reporting specificity and inter-rater consistency; and (c) baseline indicators of action patterns that institutions can use to monitor progress in closing the assessment-to-action loop. We also surface actionable implications for designing reporting templates, calibrating rubric-driven feedback, and cultivating student agency in institutional improvement (Aponte-Alequin, 2025b).

Research questions

Guided by this agenda, we ask:

1) What categories of transformative actions are most prevalent across programs, and how are they distributed by academic level?
2) How reliably can a transparent coding protocol classify actions from routine program reports, and where does under-documentation impede classification?
3) How can baseline indicators inform institutional cycles that require planning, monitoring, and reporting of assessment-driven actions?

Together, the typology, coding rules, and baseline evidence aim to help institutions worldwide move from data accumulation to documented, comparable, and improvable action, strengthening the practical significance of assessment for teaching, curricula, and student success.

Methods

We employed a qualitative, interpretive content-analysis design to classify and describe transformative actions (TAs) reported by academic programs in response to student learning assessment findings. Methods followed established guidance for qualitative research design and coding procedures (Creswell & Creswell, 2018; Creswell & Poth, 2018; Strauss & Corbin, 2015). Descriptive counts supported pattern identification but were not used for inferential claims.

The study drew on two internal documentary sources from a large public university: (a) the campus online learning assessment reporting system, where programs enter actions linked to learning evidence, and (b) institutional assessment dashboards that aggregate these entries at the program and level (undergraduate/graduate). These sources provided the full textual descriptions and basic metadata (program, level, cycle year) needed for classification.

The corpus comprised 213 action records submitted by programs during the 2022-2025 assessment cycle: 160 undergraduate and 53 graduate entries. The unit of analysis was a single action description as reported by a program; programs could contribute multiple actions over the cycle. When a single entry bundled several steps (e.g., revising a rubric and adding formative feedback), coders extracted the dominant, most consequential step as the analytic unit and noted ancillary steps in memos.

Building on assessment-improvement scholarship (Jankowski, 2017; Jankowski et al., 2018; Kinzie, 2015; Ewell, 2018) and on institutional policy frameworks for action planning and follow-up, we operationalized a portable typology of TAs:

1. Course-level pedagogical changes (e.g., task redesign, grading criteria shifts, new feedback loops)
2. Formal curricular changes (e.g., approved syllabus revisions, program outcome changes, course sequencing)
3. Academic advising/support (e.g., mentoring, targeted tutoring, early alerts)
4. Student-led or student-centered initiatives (e.g., peer mentoring, co-curricular workshops)
5. Meta-assessment (e.g., rubric calibration, instrument redesign, adding indirect measures)
6. Other (infrastructure, resourcing, proposals) when clearly action-oriented but outside 1-5
7. Non-classifiable when the text lacked sufficient specificity to assign 1-6

A structured codebook defined each category, inclusion/exclusion rules, and boundary cases, with brief examples. We applied conservative decision rules to maximize transparency and portability across contexts:

- Single primary label per action- If an action plausibly fit two labels, we prioritized the level of organizational scope (curricular > course) unless the text explicitly focused on assessment instruments, in which case meta-assessment prevailed.
- Evidence linkage required- If the entry did not state a concrete change or named only a diagnostic concern ("students struggle with X") without an implemented step, it was non-classifiable.
- Student agency- Actions explicitly designed, led, or enacted by students outside normal coursework were coded student-led/student-centered, even when faculty facilitated them.
- Compound actions- When compound, we coded the dominant step and captured secondary steps in an audit memo.

Thus, two phases structured the analysis:

- Extraction and cleaning- We exported action texts and metadata from both sources, removed duplicates, and standardized program/level fields. Obvious non-action entries (e.g., empty placeholders) were excluded.
- Coding and audit- A primary coder applied the codebook to all actions. A methodological auditor independently reviewed a stratified 25% sample (balanced by level and preliminary category). Disagreements were resolved by discussion and rule clarification; rule updates were logged and retro-applied. Because texts were brief and heterogeneous, we emphasized rule transparency and auditability over a formal kappa statistic. An audit trail (memos, versioned rules, decision logs) documents changes to the codebook during analysis.

We enhanced credibility through source triangulation (system entries + dashboards), maintained a detailed audit trail, and used peer debriefing to stress-test rules and edge cases (Creswell & Creswell, 2018). Transferability is supported by the publication of the typology, codebook, and a reusable program reporting template (Appendix B), which can be adapted across institutions. Dependability was addressed by retro-applying rule clarifications to previously coded items.

The study analyzed program-level documentation of routine quality-improvement activities; no individually identifiable student data were used. Program names were anonymized in reporting (e.g., illustrative examples use generic labels). Consistent with common practice for studies of institutional

documents, the project qualified as exempt from human-subjects review at the local level.

We summarized distributions by category and academic level, reported the share of non-classifiable entries as a documentation quality indicator, and highlighted illustrative cases that clarify decision rules. Given the qualitative design, numeric summaries served descriptive purposes only. Text fields varied in detail and clarity, constraining classification in a subset of cases. Reliance on program-entered documentation may under-represent actions that were taken but not reported, or over-represent actions reported in greater narrative detail. We therefore interpret category shares as baseline signals rather than population parameters and recommend strengthening reporting prompts to reduce non-classifiable entries.

A de-identified dataset of action texts, the full codebook, and the reporting template can be shared upon reasonable request, subject to institutional policies on internal documentation.

Results

We report distributions of transformative actions (TAs) by category and academic level, followed by a documentation-quality indicator (share of non-classifiable entries). Counts are descriptive supports to a qualitative analysis. The overall distribution, in all programs, is N = 213.

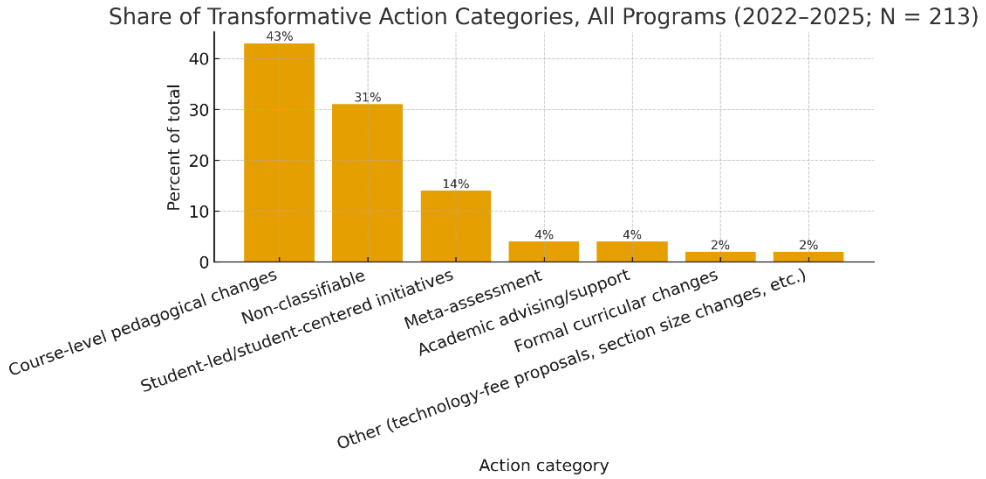
Nearly half of all actions were course-level pedagogical changes (43%), whereas formal curricular changes were rare (2%). Non-classifiable entries - texts lacking enough specificity to assign a category - accounted for 31%, revealing a substantial documentation gap. The remaining actions clustered in student-led/student-centered initiatives (14%), meta-assessment (4%), academic advising/support (4%), and other interventions (infrastructure/resources) (2% each). These categories align with improvement-oriented assessment literature; see Jankowski et al. (2018), Ewell (2018). See Table 1 for the full baseline distribution and Figure 1 for a visual summary.

Table 1. Baseline distribution of transformative actions (all programs, 2022-2025; N = 213) Categories per Jankowski et al. (2018); descriptive, not inferential

Action category	Percent of total (N = 213)	Key observations
Course-level pedagogical changes	43%	Dominate institutional responses; actions readily implemented at the pedagogical level
Non-classifiable	31%	Ambiguous or unspecific reports; critical area for improving documentation
Student-led/student-centered initiatives	14%	Interventions led by or directed to students; some innovative
Meta-assessment	4%	Few units explicitly reflect on their

		assessment processes
Academic advising/support	4%	Valuable actions, yet limited in number and systematization
Formal curricular changes	2%	Low frequency; encourage higher-scope transformations
Other (technology-fee proposals, section size changes, etc.)	2%	Isolated interventions not covered by other categories

Figure 1. Distribution of transformative action categories (all programs, 2022-2025)



Sources for Table 1 / Figure 1: the institutional corpus described in Methods; typology grounded in Jankowski et al. (2018)

Patterns differed modestly between graduate and undergraduate programs:

- Graduate programs (N = 53). Course-level changes: 54.7%; student-led/student-centered: 17.0%; meta-assessment: 9.4%; non-classifiable: 9.4%; advising/support: 3.8%; curricular: 3.8%; other: 1.9%.
- Undergraduate programs (N = 160). Course-level changes: 49.4%; student-led/student-centered: 17.5%; non-classifiable: 21.9%; advising/support: 4.4%; meta-assessment: 3.1%; curricular: 1.9%; other: 1.2%.

Table 2. Transformative actions in graduate programs (2022-2025)

Action category	Percent	Example
Course-level pedagogical changes	54.7%	Implementation of practical activities to strengthen Spanish academic writing (Translation)
Student-led/student-centered initiatives	17.0%	Creation of peer-mentoring spaces (School of Rehabilitation Counseling)
Meta-assessment	9.4%	Review of the essay-assessment instrument in History (History)
Non-classifiable	9.4%	Actions with no specific description or with ambiguous wording (all programs)

Academic advising/support	3.8%	Integration of support modules for clinical practice (Clinical Social Work)
Formal curricular changes	3.8%	Restructuring of the Research Seminar course (Communication)
Other	1.9%	Isolated initiatives not covered by the other categories

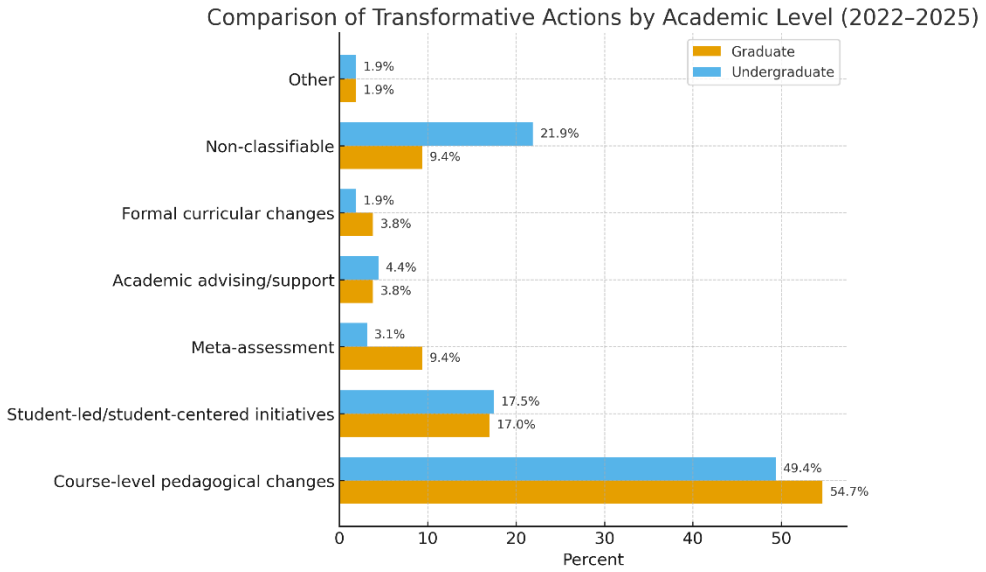
Categories operationalized per Jankowski et al. (2018); see also Ewell (2018).

Table 3. Transformative actions in undergraduate programs (2022-2025)

Action category	Percent	Example
Course-level pedagogical changes	49.4%	Use of the institutional rubric from day one as a planning guide (Biological Sciences).
Student-led/student-centered initiatives	17.5%	Creation of co-curricular activities and student-support spaces for integration.
Non-classifiable	21.9%	Entries with imprecise wording or without concrete actions described.
Academic advising/support	4.4%	Peer-mentoring implementation in courses with high repeat rates (Business Administration).
Meta-assessment	3.1%	Faculty discussions to evaluate rubric effectiveness (Humanities).
Formal curricular changes	1.9%	Thematic restructuring of foundational courses in Office Systems (Business Administration).
Other	1.2%	Point interventions such as drafting follow-up reports for committees.

Categories operationalized per Jankowski et al. (2018); see also Ewell (2018).

Figure 2. Comparison of Transformative Actions by Academic Level (2022-2025)



Sources for Tables 2 and 3 / Figure 2: the institutional corpus described in Methods; typology grounded in Jankowski et al. (2018)

The 31% share of non-classifiable entries signals a major opportunity to strengthen reporting specificity and follow-up. This pattern motivates clearer prompts in program reports, calibration of examples, and routine meta-assessment of documentation quality, which we address in the Discussion with actionable recommendations.

Discussion

Our baseline shows that course-level pedagogical changes dominate (43%), while formal curricular changes remain scarce (2%) and under-specified reports are high (31%). Read together, these patterns suggest that programs can act quickly inside courses but face greater friction when attempting higher-scope changes. This aligns with calls to move beyond compliance toward improvement-oriented assessment that produces specific, scalable actions and documented follow-up (Ewell, 2018; Hutchings, Kinzie, & Kuh, 2019; Jankowski et al., 2018; Kinzie, 2015).

The prevalence of course-level adjustments is unsurprising: task redesigns, rubric use, or feedback cycles are within faculty locus of control and can be executed within a term. Yet an emphasis on grading practices or task tweaks - without parallel syllabus or sequence redesign - can limit institutional learning (Vatterott, 2015; Banta & Palomba, 2014). The 2% curricular share likely reflects governance time lags and approval hurdles rather than a lack of need; it invites institutions to create policy and advising pathways that help programs translate evidence into syllabus and program-sequence decisions (MSCHE, 2022; Volkwein, 2011).

The 31% non-classifiable entries reveal a documentation bottleneck: many reports convey concerns (e.g., “students struggle with X”) but do not state a concrete change. This undermines the organization’s memory of “what we changed and why,” and it prevents cross-program synthesis. A practical response is to embed required fields and exemplars in reporting templates (Aponte-Alequin, 2024a, 2025a), use meta-assessment to monitor documentation specificity (share of classifiable actions), and conduct calibration sessions so that programs converge on what counts as an action and how it should be written (Jonsson & Svingby, 2007; Fraile, Gil Izquierdo, & Medina, 2023).

Graduate programs show a higher share of course-level actions (54.7% vs. 49.4%) and more meta-assessment (9.4% vs. 3.1%), while undergraduate programs account for most non-classifiable entries (21.9% vs. 9.4%). Two readings are plausible: (a) graduate programs may have tighter faculty cohorts that can coordinate quickly on instrument quality and feedback; and/or (b) undergraduate programs have higher scale and complexity, making documentation harder. Either way, the pattern supports targeted documentation support and peer mentoring for undergraduate units,

and deliberate rubric-calibration cycles across levels (Hutchings et al., 2019; Aponte-Alequin, 2025a).

A meaningful 14% of actions are student-led or student-centered, which resonates with arguments to embed student agency in assessment practice (Aponte-Alequin, 2025b; Montenegro & Jankowski, 2020). These actions - peer mentoring, co-curricular workshops, student-run clinics - benefit from coordinated student affairs infrastructures (Amante, Gabon, & Boller, 2021). To enhance their impact, programs can pair student-led strategies with advising analytics and early alerts, integrating evidence from dashboards with qualitative follow-up (Baek & Doleck, 2021).

To grow the 2% curricular share, institutions can: require that repeated course-level signals trigger syllabus or sequence review; align program-level deliberations with assessment cycles and governance calendars to shorten the time from evidence to approval (MSCHE, 2022); publish action exemplars that document successful course-to-curriculum escalations; and track an Action Scope Ratio (course-level vs. curricular actions) as a dashboard indicator for deans and assessment leads (Volkwein, 2011; Aponte-Alequin, 2025c).

Although modest overall (4%), meta-assessment actions - rubric redesign, inter-rater calibration, instrument audits - are high-leverage because they improve the reliability and usefulness of all subsequent evidence (Jonsson & Svingby, 2007; Fraile et al., 2023). Institutions can formalize annual calibration windows, attach micro-grants for instrument improvement, and include a Documentation Specificity Rate in unit scorecards (Aponte-Alequin, 2024b, 2025a).

Our typology and decision rules make routine program reports comparable across units and over time. This directly addresses the gap in the literature: while we have rich guidance on why and what to assess (Kuh, Jankowski, Ikenberry, & Kinzie, 2013; Suskie, 2018; Banta & Palomba, 2014) and on institutional responsibility (Volkwein, 2011), we lack shared, auditable ways to classify the actions themselves. This has implications for policy and practice:

a) Embed specificity prompts in reporting forms (verb + object + scope + timeline + evidence link).
b) Monitor three indicators each term: Documentation Specificity Rate (↓ non-classifiable), Action Scope Ratio (course-level : curricular), and Meta-assessment Rate
c) Institutionalize calibration (examples, norming sessions) to improve rubric use and feedback coherence
d) Support student-centered designs (peer mentoring, co-curricular bridges) with student-affairs coordination and data-informed targeting (Amante et al., 2021; Baek & Doleck, 2021)

e) Align governance calendars with assessment cycles so that curricular actions can be reviewed and approved within the following term (MSCHE, 2022)

The proposed typology, coding rules, and indicators are system-agnostic: they rely on text fields and minimal metadata that most institutions already collect, whether in learning-management systems, assessment platforms, or internal dashboards. As such, they provide a common language for documenting, comparing, and ultimately scaling what works - helping institutions worldwide move from data accumulation to documented, comparable, and improvable action.

Conclusions

This article introduced a portable typology, a transparent coding protocol, and baseline indicators to document the concrete actions that follow student learning assessment. Applied to a multi-year institutional corpus, the approach made routine program reports comparable across units and over time, moving assessment from compliance reporting toward improvement.

Course-level pedagogical changes are substantially more frequent than any other category, with student-led initiatives present across levels and formal curricular changes remaining rare. Graduate programs tend to show more instrument-focused work and fewer under-specified entries than undergraduate programs. The coding protocol classifies most entries with clear decision rules; the principal barrier is under-specification in program write-ups, which inflates the non-classifiable share and weakens organizational learning. The typology enables three actionable indicators - Documentation Specificity Rate (inverse of non-classifiable), Action Scope Ratio (course-level: curricular), and Meta-assessment Rate - that programs and deans can monitor each term to close the assessment-to-action loop.

A shared language for actions - not just for outcomes - helps institutions learn from their own improvement efforts. Documentation quality is an immediate lever: specificity requirements and exemplars reduce non-classifiable entries and improve comparability. Meta-assessment is small in volume but high-leverage: better instruments and calibration lift the usefulness of all subsequent evidence. Escalation pathways are needed to translate repeated course-level signals into curricular decisions within normal governance calendars.

At a minimum, institutions should embed specificity prompts in reporting forms (action verb, object, scope, timeline, and evidence link), schedule calibration windows each term with examples and norming to align rubric use and feedback expectations, and align governance timelines with

assessment cycles so that curricular proposals triggered by evidence can be reviewed and approved in the following term.

Findings reflect a single multi-year corpus of program-entered records; some actions may have been undertaken but not reported, and under-specification limited classification. Future work should replicate the protocol at other institutions, formally assess inter-rater reliability, and link action categories to student-level outcomes and feasibility/cost data to identify which actions deliver the greatest educational return (Aponte-Alequín & Castrillón-Velandia, 2025; Medina & Verdejo, 2019).

By publishing a typology, decision rules, and baseline indicators that most institutions can adopt with minimal data restructuring, this study contributes a practical method to move from evidence accumulation to documented, comparable, and improvable action at scale.

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