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## Research Article

### Assessing Knowledge Transformation Through an Authentic Assessment Ecosystem: Evidence from a First-Cycle Classroom Action Research Study in an Introductory Economics Course

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#### ABSTRACT

This first-cycle classroom action research study examines whether students' perception of their economic knowledge and skills can transform through an authentic assessment ecosystem of an introductory economic course. The authentic assessment ecosystem comprised learning circles organized around real Philippine economic issues, weekly scaffolded individual assignments grounded in the 10 Principles of Economics, group presentations as formative checkpoints, a midterm learning paper, and a final group podcast. Using a convergent mixed-methods design, pre-course and post-course self-assessment surveys measured changes in students' self-perceived economic knowledge and skills across five domains, while thematic analysis of post-course open-ended responses provided qualitative evidence of perspective transformation. Findings indicate a consistent and directionally uniform pattern of upward change across all survey items and all knowledge domains, with the greatest gains concentrated in foundational economic knowledge and the smallest gains observed where students entered with already high levels of competence. Qualitative analysis revealed four themes consistent with Mezirow's (1991) perspective transformation framework: a shift from intuitive to analytical decision-making, from surface to systemic understanding, from personal to social awareness of economic conditions, and from national to global analytical framing. Findings are treated as design inputs for a more methodologically rigorous second cycle and contribute practitioner-generated evidence on the role of authentic assessment ecosystems in fostering knowledge transformation in introductory economics education.

**Keywords:** *Authentic assessment, Classroom action research, Economics education, Transformative learning*

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## Background

Higher education has undergone a fundamental transformation in how it conceives its purpose and role in knowledge and skills development. The previous dominant model in university education was organized around content delivery, a model that Freire (1970) refers to as the banking model of education, wherein students are viewed as passive receptacles of knowledge and the teacher's role is to deposit or transfer knowledge. Testing was designed to assess whether students recognize and retain information.

Spady (1994) introduced what is now widely regarded as the foundational work for the outcomes-based education movement, and defines it as an approach that requires "clarity of focus on, and demonstration of significant learning culminating experiences" (p. 1). The focus is less on the delivery and more on the output. The course design depends primarily on expected learning outcomes, from which curriculum, pedagogy and assessment design development must align (Biggs & Tang, 2011).

This shift to a student-centered pedagogical model prescribes adjustments in assessments. In higher education economics courses, summative, grade-oriented assessments are predominant as they are easier to score given fixed responses, which reduces grading bias. However, these traditional tests are indirect measures of learning as they only measure static knowledge, or what students recognize and recall during a particular moment in time (Wiggins, 1990). Furthermore, as generative AI becomes more prevalent in higher education, teachers need to adapt how they measure learning and prevent students from outsourcing assessments to generative AI tools such as ChatGPT (Gogh & Kovari, 2025).

Authentic assessments are direct alternatives to traditional testing; they require students to demonstrate knowledge and skills through tasks that replicate the challenges of real-world practice (Wiggins, 1990). Authentic tasks are evaluated against transparent criteria aligned with stated learning outcomes, making the standards of performance visible to students before, during, and after the assessment (Villarroel et al., 2018), unlike in fixed-re-

sponse testing. The alignment between assessment criteria and learning outcomes is the defining feature that makes authentic assessment congruent with the outcomes-based education framework (Biggs & Tang, 2011).

Economics as a discipline is well-suited to authentic assessment because the subject matter, which involves the discussion of markets, scarcity, trade-offs, monetary and fiscal policy, and inequality, consists of real and consequential phenomena that students encounter as consumers, citizens, and future professionals. Yet introductory economics courses have historically relied on standardized, recall-based, fixed-response examinations that assess students based on what they can recall rather than on how they analyze, argue, and communicate about economic issues (Walstad & Rebeck, 2008). Authentic assessment addresses this gap by positioning students as economic inquirers rather than as passive recipients of economic theory.

The course at the center of this inquiry operationalizes authentic assessment through a coherent ecosystem of interconnected tasks. At the start of the term, students form learning circles of five to six members and select a real economic issue from a curated list, accompanied by foundational literature. Weekly individual assignments, structured around the 10 Principles of Economics, require students to analyze their chosen issue and identify additional supporting literature. Group presentations serve as formative checkpoints, allowing the instructor to assess understanding and verify the authenticity of student work. These low-stakes tasks scaffold toward two major summative requirements: a midterm learning paper and a final group podcast. Rubric criteria across both major requirements assess evidence of understanding, logic in argumentation, provision of evidence, and quality of written or oral communication. This design reflects the formative-to-summative scaffold that Villarroel et al. (2018) identify as central to effective authentic assessment course design, and the formative assessment principles that Black and Wiliam (1998) demonstrate produce measurable learning gains.

The design of the course around an authentic assessment ecosystem raised a natural question for the instructor: did students' perceptions of their own economic knowledge and skills change as a result of engaging with these authentic assessment experiences? Answering this question systematically, and reporting the findings publicly, is the task of classroom action research. Stenhouse (1975) established this tradition by arguing that teachers who conduct systematic inquiry into their own practice are not merely implementing research but generating it, defining research as systematic inquiry made public. Kemmis and McTaggart (1988) gave this tradition its structural backbone through the action research spiral of plan, act, observe, and reflect, an iterative cycle in which each phase informs the design of the next.

Action research is defined as any systematic inquiry conducted by instructor-practitioners who have a vested interest in the teaching and learning process, with the purpose of gathering evidence to inform improvements in practice (Mertler, 2013). Bassey (1998) characterizes action research as an inquiry carried out in order to understand, to evaluate and then to change, in order to improve educational practice. Cohen and Manion (1994) further describe it as an on-the-spot procedure designed to address a concrete problem located in an immediate situation, a description that precisely fits the conditions of this study.

Instructors teaching introductory economics courses in college typically rely on predominantly traditional, summative formats, including standardized examinations with fixed responses, to measure what students can recall rather than what they understand, can apply, or can communicate. The shift in outcomes-based education creates an institutional imperative to move beyond traditional assessment formats. However, there is limited practitioner-generated evidence that demonstrates how authentic assessment approaches shape how students perceive the development of their knowledge and skills in introductory economics classrooms. Instructors lack the empirical basis to make informed decisions about course design and assessment practices without systemic evidence supporting changes in students' self-perceived confidence through authentic

assessment experiences. Moreover, action research remains underrepresented in economics education research. This study addresses that gap by documenting how students' self-perceived economic knowledge and skills change across a term structured around an authentic assessment ecosystem.

This inquiry is guided by the following questions:

- RO1: How confident are students in self-assessing their economic knowledge and skills at the beginning of an introductory economics course
- RO2: How do students' confidence in their self-assessed levels of economic knowledge and skills change by the end of the course?
- RO3: In which economic knowledge and skills domains do students report the greatest and least transformation?
- RO4: What do observed patterns of student self-assessed knowledge change suggest for future instructional design and assessment practice?

This study is bound to a single introductory economics course offered across two sections at one institution during a single 14-week term. The findings discussed herein are descriptive rather than inferential, as the investigation is focused on documenting patterns of change in students' self-perceived competence within an authentic assessment ecosystem. Self-reported data is treated as a measure of perception rather than an objective and verified assessment of student competence.

## Literature Review

The review looks into three bodies of literature that jointly ground the study. The first involves classroom action research literature, which provides the foundation for the methodological framework. Next is authentic assessment literature that describes instructional intervention. Finally, the transformative learning literature provides the interpretive lens through which changes in students' economic knowledge and skills self-perceptions are

understood. The review concludes with a synthesis and convergence of these three bodies of literature.

### ***Classroom Action Research: The Practitioner as Inquirer***

Stenhouse (1975) established the foundational case for the teacher as researcher, arguing that meaningful educational improvement requires practitioners to conduct systematic inquiry made public. This inquiry involves the sharing of evidence that others can examine and build upon, rather than a mere private reflection on experience. Kemmis and McTaggart (1988) gave this tradition its most widely adopted methodological structure: the action research spiral of *plan, act, observe, and reflect*, an iterative cycle in which each phase of inquiry informs the design of the next. Unlike quasi-experimental designs, which seek causal proof through controlled comparison, classroom action research (CAR) is oriented toward improvement: its question is not did this cause that but what happened, what does it mean, and what should change? (Mertler, 2013), Christie, Carey, Robertson, and Grainger (2015) note that CAR shares a natural structural and philosophical affinity with transformative learning theory as both proceed through iterative cycles of experience, critical reflection, and renewed action, an affinity this study deliberately exploits.

### ***Authentic Assessment as a Learning Ecosystem***

Freire (1970) characterized traditional education as a banking model, knowledge deposited into passive students, with assessment verifying the accuracy of those deposits. Authentic assessment, as Wiggins (1990) defines it, is the structural alternative: tasks that require students to demonstrate competence through real-world challenges, evaluated against transparent criteria that are known in advance. Biggs and Tang (2011) formalize the bridge between outcomes-based education and authentic assessment through constructive alignment, the principle that learning outcomes, teaching activities, and assessment tasks must be coherently organized around the same competencies. Villarroel, Bloxham,

Bruna, Bruna, and Herrera-Seda (2018) extend this into a practical course design blueprint, arguing that authentic assessment functions most powerfully not as a single event but as a coherent ecosystem of scaffolded tasks, low-stakes formative assessments building toward high-stakes summative requirements. Black and Wiliam (1998) provide the empirical engine of this ecosystem: formative assessment practices that involve students in evaluating their own understanding produce measurable learning gains.

### ***Self-Assessment as Evidence of Knowledge Transformation***

Andrade (2019) situates student self-assessment within the authentic assessment tradition, explaining that students evaluating their own competence against explicit criteria engage in metacognitive reflection, which deepens learning and supports self-regulation. Karaman (2021), in a meta-analysis of self-assessment research, confirms a positive relationship between self-assessment practice and academic achievement. The pre- and post-course self-assessment surveys used in this study measure students' self-perceived economic knowledge and skills before and after a term of authentic assessment experience; they serve merely as instruments of measurement and not of intervention. This study acknowledges the inherent limitation of this approach as self-report data measure perceived competence rather than verified knowledge, and gains in confidence do not guarantee equivalent gains in objectively assessed mastery. This limitation is treated as a design input for Cycle 2, in which a complementary external assessment instrument will be considered.

### ***Transformative Learning and Knowledge Transformation in Economics***

Mezirow (1991) argues that adult learners enter formal education equipped with *meaning perspectives*, prior frames of reference that shape how new information is interpreted. Genuine learning involves not the accumulation of facts within an unchanged frame but the critical examination and revision of the frame itself: *perspective transformation*. Introductory economics is a discipline unusually rich with

prior assumptions ripe for transformation, about markets, inequality, government, and money, making it fertile ground for Mezirow's process. Freire's (1970) *problem-posing education*, in which students engage with the world as critical inquirers rather than passive recipients, provides a complementary lens: authentic, issue-based economics education is inherently problem-posing in character. Despite the theoretical richness of both frameworks, practitioner-generated evidence of how authentic assessment ecosystems shape self-perceived knowledge transformation in introductory economics remains limited, the gap this study addresses.

### **Synthesis: The Convergence of Three Frameworks**

The three traditions reviewed above converge to produce this study's analytical logic. The authentic assessment ecosystem, which includes learning circles, scaffolded assignments, a learning paper, and a podcast, constitutes the condition under which knowledge transformation is hypothesized to occur. First, the transformative learning theory (Mezirow, 1991) provides the *interpretive lens* through which changes in students' self-perceived competence are understood, as the revision of prior meaning perspectives rather than the mechanical accumulation of information. Second, the pre- and post-course self-assessment surveys serve as the *instrument of evidence*, making transformation visible through structured before-and-after reflection. Third, the classroom action research (Kemmis & McTaggart, 1988) provides the *methodological container*, the plan-act-observe-reflect spiral within which the inquiry is conducted and its findings reported for public scrutiny. The methodology through which this framework is operationalized is described in the following section.

## **Methodology**

### **Research Design**

This study follows the classroom action research (CAR) design to investigate changes in students' self-assessed economic knowledge and skills in an undergraduate economics course across a single academic term. The design follows the Kemmis and McTaggart

(1988) action research framework, which proceeds through iterative spirals of planning, acting, observing, and reflecting. Through the publication of the study findings, it fulfills what Stenhouse (1975) articulated as the essential condition of teacher-as-researcher practice: research is systematic inquiry made public. The instructor fulfilled the framework through the following steps:

- (1) *planned* the inquiry by designing parallel pre- and post-course self-assessment instruments aligned with course learning outcomes;
- (2) *acted* by delivering instruction across two sections of the same introductory economics course;
- (3) *observed* by administering both survey instruments and collecting responses; and
- (4) *reflected* by analyzing data descriptively and preparing findings for dissemination.

Within the typology established by Ferrance (2000), this study is classified as *individual teacher action research*, a form in which a single instructor examines a question arising from their own classroom context. While collaborative and school-wide forms of action research exist, individual CAR is widely practiced in higher education and is consistent with the practitioner-inquiry tradition in university teaching (Kemmis, McTaggart, & Nixon, 2019).

The study adopts a convergent mixed methods approach (Creswell & Plano Clark, 2018), whereon quantitative and qualitative data are collected concurrently, analyzed independently, and integrated in the discussion to provide a more complete account of student knowledge and skills transformation than either approach alone could provide. The quantitative strand comprises Likert-scale self-assessment ratings from pre- and post-course surveys, analyzed descriptively to document the direction and magnitude of the change in students' self-perceived economic knowledge and skills across knowledge domains defined by the course learning outcomes. The qualitative strand involves analyzing responses to two open-ended prompts from the pre-course and post-course surveys to describe how and why students' perceptions of their economic knowledge and skills changed. This analysis

also provides context for the numerical data. The qualitative findings contextualize and explain the patterns from quantitative data (Greene et al., 1989), which offers a nuanced perspective of student learning and transformation. Consistent with Mertler (2013), this action research draws on multiple, systematic data sources appropriate to the research questions.

**Research Context and Participants**

The study was conducted across two sections of the Fundamentals of Economics course, an introductory economics course offered during the 14-week second term of the 2025-2026 academic year. Both sections were taught by the same instructor using an identical syllabus, instructional materials, and assessment instruments. Undergraduate business students enrolled in the course, which carries three credit units. Responses from both sections were pooled into a single analytical dataset because both sections were delivered under equivalent instructional conditions by the same instructor. This pooled approach is consistent with the action research tradition of treating the classroom as a unified site of inquiry (Ferrance, 2000).

At the beginning of the term, students completed a pre-course survey designed to capture and provide a baseline for self-assessed levels of economic knowledge and skill across key topical domains. This survey was administered during the first week of instruction to ensure responses reflected incoming knowledge rather than perceptions influenced by the course. This timing is consistent with Mezirow's (1991) framework, in which the pre-instructional state represents students' unexamined meaning perspectives, the baseline against which transformation is subsequently measured.

The pre-course survey instrument comprised 22 items organized into four domain areas corresponding to the course learning outcomes. Students were asked to rate statements that describe levels of economic knowledge and skill using a 5-point Likert scale, where 1 = *Not at all confident* and 5 = *Very confident*. The pre-course survey was completed by N = 87 students across both sections. Table 1 lists the items according to their corresponding domain.

Table 1. Course Assessment Survey Items

Domains	Pre-Course	Post-Course
<b>How the Economy Works</b>	<b>Q1</b> Explain what common economic numbers (like GDP, inflation, or unemployment) are actually trying to measure.	
	<b>Q2</b> Make sense of news about the Philippine economy using these numbers.	
	<b>Q3</b> Use basic economic indicators to talk about real issues people are concerned about (prices, jobs, growth).	
	<b>Q4</b> Explain basic ideas like scarcity, tradeoffs, and incentives using everyday examples.	
<b>Thinking Like An Economist</b>	<b>Q5</b> Explain what people give up when they make a choice (opportunity cost)	
	<b>Q6</b> Think about decisions by asking, "Is the extra benefit worth the extra cost?"	
	<b>Q7</b> Compare options by weighing the pros and cons, and not just going with gut feeling.	
	<b>Q8</b> Use markets (buyers, sellers, prices) to explain why certain outcomes happen.	
	<b>Q9</b> Tell the difference between describing what is and arguing what should be.	

Domains	Pre-Course	Post-Course
<b>Reading, Writing, and Explaining Ideas</b>	<b>Q10</b> Read college-level economics material and understand the main point.	
	<b>Q11</b> Pick out the key idea and supporting evidence from an economics reading.	
	<b>Q12</b> Combine ideas from readings, lectures, and discussions into one clear explanation.	
	<b>Q13</b> Explain economic ideas clearly in writing.	
	<b>Q14</b> Explain your thinking clearly when speaking in class.	
<b>Working with Others and Managing Yourself</b>	<b>Q15</b> Work well with classmates during group activities or projects.	
	<b>Q16</b> Share your views while still being open to different opinions.	
	<b>Q17</b> Meet deadlines and manage your work in a way that respects other people's time.	
	<b>Q18</b> Take responsibility for your own learning (preparing, participating, following through).	
<b>Overall Confidence and Perceived Relevance of Course</b>	<b>Q19</b> Overall, how confident are you in your ability to use economics to make sense of real-world situations?	
	<b>Q20</b> How useful do you think applied economics will be for your future studies, work, or daily life? Be completely honest.	
<b>Open-Ended Questions</b>	<b>Q21.Pre</b> Which topics or ideas in economics feel confusing or intimidating right now?	<b>Q21.Post</b> What economic ideas or skills became clearer for you during the course?
	<b>Q22.Pre</b> What do you hope to get better at by the end of this course?	<b>Q22.Post</b> How has this course changed the way you think about everyday choices or economic issues?
<b>Rating: Success Confidence</b>		<b>Q23.Post</b> Think back to how you defined success in this course in a previous survey (getting a good grade, acquiring new knowledge, or applying what was learned), how confident are you that you succeeded in this course

*Developed by author*

An equivalent post-course survey was administered during the final week of the term. The instrument was structurally identical to the pre-course version, covering the same domain areas and using the same five-point Likert scale, to enable direct descriptive comparison of self-assessed knowledge and confidence before and after instruction. The parallel structure across both instruments maintain two important things: first, that the assessment criteria across both instruments should remain stable and transparent to learners (Wiggins, 1990; Villarroel et al., 2018), and second, observation instruments should systematically align with

the research questions of the study (Kemmis & McTaggart, 1988).

A total of 87 students originally completed the pre-course survey, of which six formally withdrew from the course during the term for personal reasons unrelated to the research. Their withdrawal is therefore classified as missing completely at random (Little & Rubin, 2002), as it was attributable solely to personal circumstances rather than any factor related to survey content, course performance, or research participation. The post-course survey was consequently completed by n = 81 students, which represents an attrition rate of

approximately 6.9%. This is within acceptable ranges for single-term classroom research.

The pre-course survey was distributed electronically via Google Forms during the first week of the term. Completion was estimated to require approximately 10 to 15 minutes. The post-course survey was distributed in the same format during the final week of instruction, prior to any end-of-term summative assessments. Students were identified via their institutional email addresses as required by the Google Forms platform. Email addresses were used solely to identify survey responses and were replaced with numeric codes in the analytical dataset prior to analysis. The analytical dataset retained no personally identifiable information.

This data collection procedure corresponds to the *observe* phase of the Kemmis and McTaggart (1988) action research spiral, in which the researcher gathers systematic evidence about the effects of the educational intervention, in this case, the course as delivered. As Kemmis et al. (2019) note, observation in classroom action research should be structured, purposeful, and directly linked to the questions motivating the inquiry. The parallel survey structure and consistent administration conditions across both sections fulfill this requirement.

### **Data Analysis**

Descriptive statistics, including means, standard deviations, and frequency distributions, were computed for pre-course ( $N = 87$ ) and post-course ( $n = 81$ ) responses. Both the overall composite scores and individual domain scores were computed. As the sample sizes differ across the two administrations and no paired inferential test is conducted in this cycle, responses are treated as independent descriptive snapshots rather than matched pairs. This approach is appropriate for a first-cycle action research study in which the primary purpose is to document observable patterns rather than to test statistical hypotheses.

Pre- and post-course scores are compared domain by domain to identify which areas of economic knowledge showed the greatest directional change and which showed more modest or negligible change. Likert-scale shift patterns, including changes in the proportion

of students rating themselves at each scale point, are reported for each domain. This domain-level analysis directly addresses RQ3 and generates the most actionable findings for instructional redesign succeeding action research cycles, which consistent with the *reflect* phase of the action research spiral.

Observed patterns of score change are interpreted through the lens of Mezirow's (1991) transformative learning theory. Specifically, the direction and relative magnitude of domain-level changes are examined for consistency with the perspective transformation that Mezirow identifies as the hallmark of transformative learning in adult education. Domains in which students report substantial upward shifts are interpreted as areas of successful perspective transformation; domains in which change is limited are interpreted as areas warranting revised instructional approach or additional scaffolding in Cycle 2. This interpretive layer bridges the quantitative descriptive findings with the theoretical framework and provides the study with the analytical depth appropriate to its action research orientation.

Following Lincoln and Guba (1985), this study establishes rigor and trustworthiness through transparent reporting of methods, instruments, and analytical procedures, and by situating all interpretive claims within the broader scholarly literature. The parallel construction of the pre- and post-course instruments supports internal consistency, ensuring that observed changes in score distributions can plausibly be attributed to the intervening instruction rather than to changes in the instrument. The transparent alignment of survey domains with published course learning outcomes supports content validity (Wiggins & McTighe, 2006). The pooled analysis of two sections taught under identical conditions provides a modest degree of cross-sectional corroboration; if patterns are consistent across both sections, this strengthens confidence in the findings, consistent with Beverland and Lindgreen (2010). The researcher also acknowledges the reflexivity challenge inherent in action research: as both instructor and researcher, the author occupies a dual role that may introduce confirmation bias.

### Findings and Discussion

This section presents and interprets the findings from the pre-course (N = 87) and post-course (n = 81) self-assessment surveys. Consistent with the descriptive and reflective orientation of this first-cycle action research study, the two survey administrations are treated as independent descriptive snapshots rather than matched pairs. Findings are organized around the five domain groups established in the survey instruments, followed by thematic analysis of three open-ended post-course prompts. Throughout, findings are analyzed as described above, with the authentic assessment ecosystem as the condition for change, transformative learning theory (Mezirow, 1991) as the interpretive lens, and the action research spiral (Kemmis & McTaggart, 1988) as the methodological frame. All student responses cited in Section 4.6 are identified by assigned numeric codes to protect confidentiality.

#### Overview: A Consistent and Directionally Uniform Pattern of Change

Self-assessed scores rose between the pre- and post-course administrations across all 20

survey items and all five domain groups; no individual item registered a decline. The overall mean increased from 3.53 (pre-course) to 4.54 (post-course), representing a gain of +1.01 on the five-point scale. This directional uniformity, the absence of any domain in which students felt less competent at the end of the term than at the beginning, is itself a substantive finding. It suggests that the authentic assessment ecosystem created conditions in which students experienced broad and consistent upward movement in their self-perceived economic knowledge and skills, rather than gains concentrated in isolated areas.

The highest gain came from Q19, which measures overall student confidence in their ability to use economics to make sense of real-world situations; this gain provides the most vivid illustration of this confidence shift. At the start of the term, only 5.7% of students rated themselves at the highest confidence level (5 = *very confident*), while 37.9% rated themselves at level 3 or below. By the end of the term, 58.8% of students rated themselves at level 5, and no student rated themselves at levels 1 or 2. Table 2 presents the frequency distribution for this item across both administrations.

Table 2. Frequency Distribution: Overall Economic Confidence (Q19)

Scale Point	1 — Not at all	2 — Slightly	3 — Somewhat	4 — Mostly	5 — Very confident
<b>Pre-course (N = 87)</b>	1 (1.1%)	5 (5.7%)	28 (32.2%)	48 (55.2%)	5 (5.7%)
<b>Post-course (N = 81)</b>	0 (0.0%)	0 (0.0%)	3 (3.8%)	30 (37.5%)	47 (58.8%)

*Developed by author*

The magnitude of gains varies systematically across domains, a pattern that is not random but theoretically coherent, as the discussion sections below will show. The highest gains come from the domains that scored the lowest in the pre-course survey, specifically

How the Economy Works and Reading, Writing, and Explaining Ideas, demonstrating that students significantly developed confidence in these domains. Table 3 presents the full domain-group summary.

Table 3. Domain Group Summary: Pre- and Post-Course Means and Change

Domain Group	Pre M (N=87)	Post M (n=81)	Δ
How the Economy Works	3.09	4.60	+1.51
Thinking Like an Economist	3.44	4.63	+1.18
Reading, Writing, and Explaining Ideas	3.17	4.29	+1.12
Overall Confidence and Perceived Utility	3.88	4.57	+0.70

Domain Group	Pre M (N=87)	Post M (n=81)	Δ
Working with Others and Managing Yourself	4.37	4.68	+0.31
<b>Overall Mean (all 20 items)</b>	<b>3.53</b>	<b>4.54</b>	<b>+1.01</b>

*Developed by author*

**Greatest Transformation: How the Economy Works (Δ = +1.51)**

The domain group showing the greatest transformation was *How the Economy Works*, comprising four items covering economic indicators, the Philippine economy, real-issue application, and the foundational concepts of

scarcity, tradeoffs, and incentives. The group mean rose from 3.09 to 4.60, a gain of +1.51. This was also the domain group with the lowest pre-course baseline, indicating that students entered the course least confident precisely in the area most central to economic literacy. Table 4 presents item-level detail.

*Table 4. How the Economy Works: Item-Level Means and Change*

Survey Item	Pre M	Post M	Δ
Explain economic numbers (GDP, inflation, unemployment)	3.08	4.45	+1.37
Make sense of Philippine economy news	3.03	4.53	+1.50
Use economic indicators to talk about real issues	3.29	4.67	+1.38
Explain scarcity, tradeoffs, and incentives	2.97	4.74	+1.77

*Developed by author*

The single largest gain in the entire dataset (+1.77) was recorded for the item on scarcity, tradeoffs, and incentives. This item also carried the lowest pre-course mean of any item across all 20 (Pre M = 2.97), indicating that students entered with the greatest uncertainty about concepts that sit at the very foundation of economic thinking. The movement of this item from below the midpoint of the scale (2.97) to near the ceiling (4.74) is consistent with Mezirow's (1991) account of perspective transformation: students who entered with incomplete or absent prior frameworks for these concepts encountered them through the authentic assessment ecosystem in ways that prompted substantive revision of their self-understanding.

The specificity of the Philippine economy item (+1.50) is also noteworthy. The course's authentic assessment design organized student inquiry around real Philippine economic issues, including topics such as whether Php 10,000 is sufficient to support a family of five, the economics of migration, and fast fashion's economic footprint, grounding abstract

economic indicators in students' own national context. Wiggins (1990) argues that authentic tasks derive their power precisely from this kind of contextual grounding: students are not performing economic analysis in the abstract but applying economic reasoning to issues that are genuinely consequential in the world they inhabit. The strong gain on the Philippine economy item suggests that this design choice was particularly effective in building the bridge between economic concepts and lived economic reality.

**Sustained Gains: Thinking Like an Economist (Δ = +1.18)**

The second highest-gaining domain group, *Thinking Like an Economist*, covers five items addressing the analytical toolkit of economic reasoning: opportunity cost, marginal thinking, cost-benefit analysis, market analysis, and the distinction between positive and normative economics. The group mean rose from 3.44 to 4.63, a gain of +1.18. Table 5 presents item-level detail.

Table 5. Thinking Like an Economist: Item-Level Means and Change

Survey Item	Pre M	Post M	$\Delta$
Opportunity cost	3.40	4.70	+1.30
Marginal thinking (extra benefit vs cost)	3.56	4.67	+1.11
Weighing pros and cons	3.77	4.64	+0.87
Markets (buyers, sellers, prices)	3.31	4.53	+1.22
Positive vs normative economics	3.17	4.59	+1.42

Developed by author

The item on positive versus normative economics recorded the largest individual gain within this group (+1.42), despite also carrying the lowest pre-course mean (Pre M = 3.17). This is a conceptually demanding distinction, the difference between describing what *is* and arguing what *should be*, that students entering from non-economics senior high school tracks would have had little prior exposure to. The weekly individual assignments, structured around the 10 Principles of Economics and requiring students to analyze real issues from multiple stakeholder perspectives, directly scaffold this distinction: students were repeatedly required to identify facts first grounded on evidence and research, before moving to more complex analysis that required them to identify challenges and their sources before providing evidence-based recommendations in later requirements.

The smallest gain within this group, weighing pros and cons (+0.87), is interpretively interesting rather than concerning. This item carried the highest pre-course mean in the group

(Pre M = 3.77), suggesting that students already felt relatively capable of weighing options before the course began. What the course appears to have added is not the general capacity to compare options but a specifically *economic* framework for doing so, a distinction that aligns with Mezirow's (1991) account of perspective transformation as the revision of an existing frame rather than simply the addition of new content within it.

#### **Consistent Gains: Reading, Writing, and Explaining Ideas ( $\Delta = +1.12$ )**

The domain group covering literacy, writing, and communication skills showed consistent gains across all five items, with a group mean rising from 3.17 to 4.29 ( $\Delta = +1.12$ ). This consistency, four of five items clustered within a narrow gain range, suggests that the scaffolded design of the authentic assessment ecosystem developed these skills systematically rather than unevenly. Table 6 presents item-level detail.

Table 6. Reading, Writing, and Explaining Ideas: Item-Level Means and Change

Survey Item	Pre M	Post M	$\Delta$
Reading college-level economics material	3.20	4.29	+1.09
Identifying key ideas from readings	3.28	4.44	+1.16
Synthesizing ideas from multiple sources	3.33	4.38	+1.05
Writing economic ideas clearly	3.15	4.30	+1.15
Speaking clearly when explaining ideas	2.91	4.04	+1.13

Developed by author

The literacy and writing items (reading, identifying key ideas, synthesizing sources, and writing clearly) developed in direct response to the course's scaffolded design. The weekly individual assignments required students to engage with foundational economics literature and self-sourced readings, identify key

arguments, and express their analysis in writing. The midterm learning paper then required them to synthesize these skills into a sustained, coherent written argument. The gain pattern across these four items is consistent with what Villarroel et al. (2018) describe as the benefit of a formative-to-summative scaffold: skills

practiced in low-stakes contexts are consolidated and refined as progressively higher-stakes requirements are introduced.

The oral communication item, speaking clearly when explaining ideas, recorded the lowest pre-course mean in this group (Pre M = 2.91) and the lowest post-course mean (Post M = 4.04). Despite a gain of +1.13, comparable to the other items in the group, oral communication remained the area of greatest relative challenge. This is consistent with a broader pattern in the higher education literature: students who are developing expertise in a new field often feel less confident expressing that expertise orally than in writing, particularly early in their academic careers (Black & Wiliam, 1998). The group presentation component of the course addressed this skill directly; however, the finding suggests that oral communication may benefit from more structured scaffolding in Cycle 2,

for example, through low-stakes speaking tasks earlier in the term, or through explicit feedback on presentation delivery alongside content.

#### ***A Ceiling Effect: Working with Others and Managing Yourself ( $\Delta = +0.31$ )***

The domain group covering collaborative and self-directed learning skills recorded the smallest gains of any group, a mean change of +0.31, compared to +1.51 for the highest-gaining group. This finding requires careful interpretation: it does not indicate that the authentic assessment ecosystem failed to develop these skills, but rather that students arrived with these skills already highly developed. The pre-course group mean for this domain (4.37) was the highest of any domain group in the entire pre-course dataset. With a ceiling of 5.0, meaningful movement was structurally constrained. Table 7 presents item-level detail.

*Table 7. Working with Others and Managing Yourself: Item-Level Means and Change*

<b>Survey Item</b>	<b>Pre M</b>	<b>Post M</b>	<b><math>\Delta</math></b>
Teamwork in group activities	4.39	4.66	+0.27
Sharing views while open to others	4.32	4.71	+0.39
Meeting deadlines	4.38	4.60	+0.22
Taking responsibility for learning	4.37	4.75	+0.38

*Developed by author*

This study also recognizes that the self-reported data may inflate students' actual abilities. However, based on observation, most students are able to work productively in groups, share ideas with others, meet deadlines, and take responsibility for their learning, with a few exceptions, which is typical in the undergraduate classroom. Furthermore, this finding validates rather than challenges a core design assumption of the learning circle structure. The authentic assessment ecosystem assigned students to collaborative groups precisely because collaborative competence was expected to be a prior strength that could be leveraged in service of economic knowledge development, not a skill that the course needed to build from scratch. Students brought high collaborative capacity into the course; the course directed that capacity toward the sustained, real-issue economic inquiry that the learning circle design required. In this respect, the ceiling

effect in this domain confirms that the course's assessment design was appropriately calibrated: it targeted the right skills for development (economic knowledge and reasoning) and built on existing strengths (collaboration and self-direction) rather than treating all competencies as equally underdeveloped.

This finding also generates a practical design implication for Cycle 2. Items that produce near-ceiling pre-course responses are poor discriminators of change and consume survey space that could be better used to capture more sensitive dimensions of development. In the second cycle, these items may be revised to assess more advanced collaborative competencies, for example, the quality of economic argumentation within the learning circle, or the capacity to integrate diverse perspectives into a coherent group analysis, which are less likely to produce ceiling effects in an introductory-level student population. Alternatively, an external

review, such as peer assessments, could be used to triangulate self-reported data.

### **Qualitative Evidence of Perspective Transformation**

The post-course survey included two open-ended prompts designed to elicit reflective responses about students' learning experience: (1) *What economic ideas or skills became clearer for you during the course?* (2) *How has this course changed the way you think about everyday choices or economic issues?* Responses to these prompts are analyzed thematically, with illustrative student quotations identified by assigned numeric codes. Themes are interpreted through Mezirow's (1991) framework of perspective transformation, in which genuine learning involves not merely the acquisition of new information but the revision of prior meaning perspectives in light of new experience.

#### **What Became Clearer: Economics explains how people make choices and how the world works**

The most striking realization of students is the understanding that economics is a systematic framework that helps them make sense of the world, rather than their a priori assumption that it is an abstract concept detached from their reality. Through the 10 Principles of Economics, students learn that economics helps them understand how they make choices, how they interact, and how the world works.

The most striking feature of student responses is not that they learned new concepts but that many describe recognizing economic principles in experiences they were already having, but lacked the language or framework to name. This aligns precisely with Mezirow's (1991) account of perspective transformation: not the construction of an entirely new worldview but the revision of an existing, often unarticulated frame through which prior experience is reinterpreted.

To most students, the concept of tradeoffs and opportunity costs felt intimidating, as indicated by their pre-course survey scores of Q4 (2.97) and Q5 (3.40). These items received the highest gains, 1.77 and 1.3 respectively. Post-course qualitative responses suggest student

perspectives moved from being intimidated by these economic principles to recognizing that they knew these concepts all along. Students consistently describe recognizing that they had been making tradeoffs and experiencing opportunity costs long before the course gave them the language to identify these as economic phenomena:

*I feel like the idea of tradeoffs and opportunity cost became clearer. Because before, I was thinking of the concept, and most probably I was doing that in real life, but I didn't really know that there was a name to the possible things that you sacrifice for choices you make.*

Students also recognize the interconnect- edness of economic actors and institutions, in that decisions made by one stakeholder impacts outcomes that affect other stakeholders. This understanding particularly emerged through working on their learning circle issues, which allowed them to trace the impact of stakeholder decisions and the effects of economic phenomena across multiple stakeholders:

*An economic idea that became clearer to me is that everything in the economy is interconnected. Every action or decision has a cause and effect, and ideas, resources, and behaviors circulate within the system, influencing one another.*

Perhaps one of the most profound recognition comes from understanding how the scarcity of resources influences how stakeholders make choices and behave in society. The lesson on scarcity begins through a casual discussion on how students make use of their time and allowance. Over time and through working on their learning circle issues, their understanding of scarcity and its effect evolves. Students eventually recognize that scarcity explains why economic systems, including political and social systems work as they do:

*The concept that the world runs on scarce resources became such a profound learning for me, as it really explains why*

*and how the world operates the way that it does right now.*

The learning circle issues where particularly valuable in helping students understand how the Philippine economy works. Many learning circle issues tackle Philippine poverty and how it impacts economic choices made by stakeholders. One issues specifically transformed student perspectives on equity and how growth does not always trickle down society equitably:

*During the course, especially with my topic 'Is Php 10,000 enough to support a family of five,' I better understood how factors like inflation, wages, and cost of living affect real-life situations. It showed me that even if the economy is 'growing,' families can still struggle when income doesn't keep up with rising prices.*

**How Thinking Changed: Economics facilitates deliberate and systematic thinking, and social and global awareness**

Item Q22 of the post-course survey asks students to reflect on how economics has changed the way they think about everyday choices (*How has this course changed the way you think about everyday choices or economic issues?*). This question generated the richest and most varied qualitative evidence in the dataset. Four distinct themes emerged from the responses, each consistent with a different dimension of Mezirow's (1991) perspective transformation framework.

First, there is a clear and demonstrable transformation not just in student perspectives but also in behavior. In going through the course and comprehending the economic lessons that all choices bear costs, students become more deliberate in decision-making:

*Before, I only relied on my gut feeling instead of thinking about how one choice might benefit me more than another. Through the course, I learned to be more mindful and analytical when making decisions. Now, I try to evaluate my options more carefully and consider which*

*choice will benefit me long-term or give me the most value.*

*It's not just buying a 100-peso coffee, I'm trading the twenty minutes of sleep I lost to get it or the video game I could have bought with that money by the end of the week. It turns our lives into a series of trade-offs, making us much more intentional about where our time and energy goes.*

This shift from gut feeling to deliberate analysis, which Freire (1970) characterizes as the movement from naive to critical consciousness, whereby students examine the conditions and choices they make shape their reality rather than merely accepting what is. It is also this cognitive shift that the authentic assessment ecosystem was designed to produce: students who do not merely learn about economic reasoning but practice it, repeatedly, in the context of real issues and in their daily lives.

Another demonstration of transformation is the way students describe expanding their frame of reference. Students learning to trace how each choice may lead to outcomes, developing the ability to see individual decisions made by stakeholders are interconnected and taken together can significantly impact each other's outcomes. This systematic awareness typically emerge as students examine and trace the economic effects across multiple stakeholder groups in their respective learning circle issues. In doing so, students realize that different stakeholders will view the same issue from different perspectives, as they experience different tradeoffs and opportunity costs, which lead to different decisions and outcomes. Regardless of how each stakeholder decides, each decision can ultimately impact the others as a result of interconnectedness:

*Economics makes you look a bit more systemic rather than looking things at just the surface level or face value. Because, at first, I was confused: Why would donations be bad? But if you look at the root cause of what it's trying to aid, it doesn't really help.*

*I now understand better that these everyday choices or economic issues are not merely isolated actions or decisions we make. They are all interconnected, from the key players and their thought process, to the short- and long-term outcomes that affect society as a whole.*

This expansion from surface to systemic understanding is consistent with what Mezirow (1991) describes as the development of more inclusive and discriminating meaning perspectives, frames of reference that can accommodate greater complexity and longer causal chains than those students held at the start of the term.

A less common but particularly significant theme involved students describing a shift in awareness toward the economic conditions of people beyond themselves, particularly marginalized communities affected by the issues their learning circles examined. This movement from personal to social awareness is consistent with Freire's (1970) concept of *conscientização*, which is the development of critical consciousness about the social and economic structures that shape human lives:

*I look at the bigger picture more often and silently criticize the way the government is, especially since my topic is the importance of economics. I realized how unfair it is for most of the underprivileged sectors since their illiteracy is somehow a result of the government's corruption which affects the accessibility to quality education.*

*Our issue, which was whether Php 10,000 is sufficient for a family of five for a month, really changed my view on my spending habits, and made me think deeper about the economic issues that we are currently facing. I am thankful enough to not be directly affected by the issue, however, gaining more information about it gave me insights on how deeply rooted this issue is and the factors that affect it.*

The emergence of this theme suggests that the authentic, issue-based design of the course did more than develop economic reasoning

skills, it positioned students as members of an economic community in which their choices and the conditions of others are interconnected. This is a pedagogically significant outcome that extends beyond the stated learning outcomes of an introductory economics course.

Finally, a fourth theme involved students describing a new ability to connect local economic phenomena to global dynamics, to read economic news, understand policy decisions, and situate Philippine economic issues within international economic systems:

*Given the current turmoil in the country, I feel more equipped to analyze economic events critically and understand their broader implications on everyday life. Concepts like opportunity cost, trade-offs, and incentives have become much clearer, and I can see how they play out in real-world scenarios.*

*With the war going on, we are all affected by the choices of these powerful people. Even if we are not the ones getting attacked or bombed, we still bear effects or consequences.*

This expansion of analytical frame, from personal decisions to national issues to global dynamics, represents a progression through Mezirow's (1991) phases of perspective transformation: from the initial disorienting dilemma of encountering unfamiliar economic concepts, through critical reflection on prior assumptions, to the construction of a more inclusive and expansive frame of reference through which economic reality can be interpreted.

### ***Success Confidence: Students' Own Verdict on Their Learning***

The last question of the post-course survey asked students to reflect on how they had defined success at the start of the term, whether as earning a good grade, acquiring new knowledge, or applying what they learned, and to assess how confident they were that they had succeeded on their own terms. The responses were notably positive: 96.2% of post-course respondents rated their confidence in

having succeeded at 4 or 5 on the five-point scale (48.8% at level 5; 47.5% at level 4). Only three students (3.7%) rated themselves below 4.

It is important to note that this question is not a course satisfaction measure. By asking students to assess their success against their own previously stated goals rather than against the instructor's criteria, it elicits authentic self-assessment in Andrade's (2019) sense: students evaluating their own achievement against explicit, self-generated standards. The near-universal positive response, taken alongside the qualitative richness of Q21 and Q22, suggests that students perceived genuine transformation rather than mere content coverage, an important distinction in a course designed around an authentic assessment ecosystem rather than a traditional transmission model.

The three students who rated themselves below 4 deserve acknowledgment. Their responses are not elaborated in the open-ended data, but their presence is a reminder that the authentic assessment ecosystem did not produce uniform outcomes for all students. Understanding which conditions supported or constrained transformation for these students is a question that the second cycle of this action research program, with its more rigorous matched-pair design, will be better positioned to investigate.

### ***Discussion: Interpreting the Pattern Through the Conceptual Framework***

Taken together, the quantitative and qualitative findings of this study present a coherent and theoretically interpretable picture. Three features of the pattern deserve particular attention in the context of the study's conceptual framework.

**The pattern of gains is theoretically coherent, not random.** The largest gains occurred in the domains where students began with the greatest uncertainty, economic knowledge and reasoning, and where the authentic assessment ecosystem most directly engaged them through real-issue inquiry. The smallest gains occurred where students were already highly competent, collaborative and

self-directed learning. This is not a random scatter of change but a directionally systematic pattern consistent with both Mezirow's (1991) account of perspective transformation (change is greatest where prior frames are most challenged) and Wiggins' (1990) account of authentic assessment (tasks that engage students in genuine disciplinary practice produce the deepest knowledge gains). The finding supports the inference that the authentic assessment ecosystem created conditions favorable to knowledge transformation while stopping well short of claiming that it *caused* those gains in a statistically demonstrable sense.

**Reflexivity.** This study was designed and conducted by the course instructor and main author, who designed the authentic assessment ecosystem, delivered the instruction, administered the surveys, and analyzed the data. The instructor performed dual roles of practitioner and researcher, a defining feature of the classroom action research and source of both strength and limitation. The practitioner role provided insider access to the pedagogical context, instructional decisions, and classroom relational dynamics that an external researcher could not replicate. At the same time, it creates the possibility of a confirmation bias, which is addressed by engaging a secondary author with similar experiences to review and provide an unbiased lens.

As explained in the Methodology section, several measures were also taken to mitigate the risks, including using fixed Likert-scale items with open-ended questions to contextualize data. Qualitative findings are reported using direct quotations, which allows readers to evaluate the findings against the evidence on which they are based. Findings are reported transparently and descriptively, and limitations are acknowledged explicitly. Publishing this work in a peer-reviewed forum is a reflexive act (Stenhouse, 1975), as it submits a practitioner-generated account to public scrutiny rather than limiting it to private reflection.

Most importantly, the research aims to demonstrate the pedagogical value of anchoring Philippine economic issues in the discussion of economic principles and as the context for student inquiry. Economics

becomes more meaningful when it is grounded in the economic realities students inhabit and experience. This choice reflects Freire's (1970) problem-posing tradition and moves away from the transmission model that historically dominates economic education.

**The qualitative evidence is consistent with perspective transformation, not merely content learning.** The themes that emerged from student responses to the open-ended prompts, specifically what became clearer and how thinking changed for students, describe the hallmarks of Mezirow's (1991) transformative learning: how they make meaning or make sense of what they experienced. Students did not merely describe the accumulation of new facts or information; rather, they described a changed perspective on economic reality, a new way of seeing their own decisions, the decisions of others, and the economic systems that connect them. They developed critical awareness of social and economic conditions (Freire, 1970), which is visible in the responses of students who describe not only thinking differently about their own spending but feeling differently about the economic conditions of marginalized communities. This is an outcome that goes beyond the typical learning outcomes of an introductory economics course and speaks to the transformative potential of authentic, issue-based assessment design.

**The findings generate specific, actionable design inputs for Cycle 2.** In the spirit of the action research spiral, in which each cycle of reflection informs the next cycle of planning, the findings point to four concrete design improvements for the second cycle of this study.

First, oral communication skills showed the lowest gains, indicating they will require more explicit scaffolding. Providing more opportunities of in-class recitations and incorporating learning circle issues in discussion more deliberately may help close this gap.

Second, the ceiling effect in the domain of Working With Others and Managing Yourself need to be addressed to serve as a more sensitive measure of change. Cycle 2 may need to triangulate self-reported gains in this domain with a peer assessment rubric.

Third, the Philippine-issue-based authentic design should be retained: the strong gains on economic indicators, real-issue application, and the Philippine economy item, together with the qualitative evidence of students connecting economic concepts to their national context, confirm that this design choice was effective.

**The resource demands of authentic assessments.** Marking authentic assessments requires significantly more resources from instructors than marking fixed-response assessments, which raises questions about their sustainability. The collaborative activities helped reduce the number of outputs to be assessed, and the scaffolded design helps trace the development of research and analysis, which facilitates the assessment process for high-stakes requirements.

Nonetheless, the instructor finds it difficult to catch each and every mistake or incorrect assumption made by students in their assessments. The issue above begs the question: is it at all the responsibility of instructors to identify and correct each and every mistake committed by students in their assessments? Or is this mindset an offshoot of the traditional fixed-response assessment thinking that points need to be docked for every mistake made? Furthermore, does this kind of thinking leave room for the reality that perspectives change and evolve as socio-economic issues themselves evolve? The value in authentic assessments is their ability to understand the student's thought process, and not merely ascertaining that a student is able to recall an economic concept at a particular period in time.

**Limitations of interpretation.** These findings must be interpreted in light of the study's methodological constraints. Self-report data measures perceived competence rather than verified knowledge, and it is possible that some of the upward movement in scores reflects increased confidence or familiarity with economic language rather than deep conceptual mastery. The absence of matched-pair analysis means that individual-level trajectories cannot be traced, and the absence of a control or comparison group means that alternative explanations

tions for the observed gains, including maturation, general university adjustment, or exposure to economic news during the term, cannot be ruled out. These limitations do not invalidate the findings but establish their appropriate scope: they are descriptive, practitioner-generated, and first-cycle, the starting point of a program of inquiry rather than its conclusion.

## Conclusion

This study set out to document and describe changes in students' self-perceived economic knowledge and skills across a single academic term structured around an authentic assessment ecosystem. The findings, drawn from pre-course ( $N = 87$ ) and post-course ( $n = 81$ ) self-assessment surveys administered across two sections of an introductory economics course, are consistent and directionally uniform: self-assessed scores rose across all 20 survey items and all five knowledge domains, with an overall mean gain of +1.01 on the five-point scale. No domain registered a decline.

Addressing the four research questions in turn: students entered the course with moderate self-assessed confidence in economic knowledge and skills overall ( $M = 3.53$ ), with the greatest uncertainty concentrated in foundational economic concepts, that is, scarcity, tradeoffs, incentives, and economic indicators. By the end of the term, overall self-assessed confidence rose to 4.54, with the most substantial transformation recorded in the How the Economy Works domain ( $\text{delta} = +1.51$ ), driven by the single largest individual gain in the dataset: scarcity, tradeoffs, and incentives (+1.77). The domains of economic reasoning, literacy, and communication showed consistent moderate gains ( $\text{delta} = +1.12$  to  $+1.18$ ), reflecting the systematic development of these skills through the course's scaffolded assessment architecture. The collaborative and self-directed learning domain recorded the smallest gains ( $\text{delta} = +0.31$ ), a finding explained by pre-existing ceiling-level competence rather than instructional limitation. Qualitative responses from students corroborated these quantitative patterns, revealing four themes consistent with Mezirow's (1991) account of perspective transformation: a shift from intuitive to analytical decision-making, from surface

to systemic economic understanding, from personal to social awareness of economic conditions, and from national to global analytical framing.

For future cycles of this action research program, four design recommendations follow directly from the findings. First, oral communication requires more structured scaffolding: despite meaningful gains, speaking remained the area of greatest relative challenge, suggesting that low-stakes oral tasks introduced earlier in the term would better prepare students for the demands of the group podcast. Second, the collaborative and self-directed learning survey items should be revised or replaced with more sensitive measures that avoid ceiling effects and capture advanced collaborative competencies appropriate to an upper-level introductory course. Third, the Philippine-issue-based authentic design should be retained and potentially extended: the quantitative gains on economic indicators and the qualitative evidence of students connecting concepts to lived national experience confirm that contextual grounding was a significant driver of transformation. Fourth, a paired-samples inferential analysis should be implemented in Cycle 2 using an anonymous self-generated matching code system, accompanied by a complementary external knowledge assessment instrument to triangulate self-reported gains with objectively verifiable evidence of learning.

For practitioners in economics education more broadly, this study offers a concrete and replicable model of authentic assessment course design whose component elements, including learning circles organized around real economic issues, weekly scaffolded individual assignments, group presentations as formative checkpoints, and major summative requirements in the form of a learning paper and podcast, are individually adaptable to different institutional contexts and course configurations. The consistent upward movement in student self-perception across all knowledge domains, and the qualitative evidence of genuine perspective transformation rather than surface content coverage, suggest that the displacement of traditional recall-based assessment in favor of a coherent authentic assessment ecosystem is associated with meaningful shifts in

how introductory economics students understand their own developing competence. Practitioner-researchers in other disciplines may find the convergent mixed-methods action research design employed here, combining Likert-scale pre-post surveys with thematic analysis of open-ended student reflections, a useful and accessible model for generating locally grounded evidence of their own assessment design decisions. As a first-cycle study, this work is explicitly a beginning rather than a conclusion. Its value lies not only in what it documents but in what it makes possible: a second cycle better designed, more rigorously analyzed, and more confidently situated within a growing body of practitioner-generated evidence on authentic assessment and knowledge transformation in higher education.

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