

Writing to Learn: Using A Single Context Method

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Objective of this Talk

Thinking out loud about the pros and cons of a writing-based approach to teaching and learning that I used in Winter 2008.

Following the lead of

William Zinsser. Writing to Learn. 1988.

Organization of the Talk

1. Background and roads traveled
2. Objectives and desired elements
3. Design features and implementation
4. Advantages and limitations
5. Application of the method in other fields

Econ 5001

Macroeconomic Theory for the Master of Development Economics

- Level: graduate level with a research focus
- Content: theory in a quantitative discipline and an applied program
- Audience: diverse backgrounds
- Delivery method: lectures
- Student expectations: varied interests

Past Evaluation Methods

- Exams only
- Exams plus a group project
- Exams plus an individual term paper

Given the objectives of this course, each evaluation method had a downside.

Effectiveness: Exams Only

- Hard to tailor to individual backgrounds
- Few specific contexts for application/experimentation
- Expected outcomes defined by the instructor with no explicit goal-setting by students

Effectiveness: Group Project

- Limited connection to core course content
- Aggregation of (often conflicting) student interests
- Aggregation of **individual** efforts
- Limited instructor–group interaction

Effectiveness: Individual Term Paper

- Lack of continuity and engagement
- Limited instructor–student interaction and exchange
- Limited connection to core course content

Aligning Evaluation with Course Objectives

- Learning theory in an applied program
 - exposure to **context**
- Independent learning
 - **research**
- Clear and concise communication of research findings
 - **essays**
- Conceptual maturity through engagement
 - **frequent** evaluations

Cognitive Ladder: Goals

Assessment should allow for intellectual maturity:

- given **comprehension** and basic **knowledge** in economics
- gradually build-up from
 - **application**, and
 - **analysis** to
 - **synthesis**
- with possibility of **evaluation** by advanced students

Cf. Bloom's taxonomy

The Method

Writing to learn : Using a single context method
research objectives

Structure: weekly essays
engagement objectives

The core: multidimensional analysis of a subject matter through essays using a single context chosen by each student

Key Elements of Implementation

1. **Theoretical framework** in lectures (3 hrs/week)
2. **Guidance** for selecting the context
3. **Cognitive ladder** and progression of assignment content
4. **Group versus individual** work
5. **Communication** of expected outcomes
6. **Evaluation** methods

Implementation: Context

One country of individual choice for macroeconomic analysis for the entire term

- Guidance for selecting the context:
 - workshop on available library sources and data
 - emphasis on intellectual curiosity rather than prior familiarity with the context (e.g., I discouraged the choice of native country)
 - **bibliography?**

Implementation: Single Context

Cognitive ladder in 3 steps (minimum 2 essays per step):

1. Essays 1–3: build comprehension and knowledge about the specific context
2. Essays 4–6: develop application of theoretical framework and analysis through highly structured essay questions written by instructor
3. Essays 7–9: encourage analysis and synthesis through less structured essay topics proposed by instructor

Implementation: Assessment

Versatility in group and individual work:

- nine (9) essays total
- one full group essay: comparative analysis (step 2)
- one group and individual essay combined
- two essays rewritten after reviews by peers
- one essay rewritten after comments by instructor

Implementation: Expectations

Expected outcomes clearly communicated to students:

- style guidelines
- writing resources
- essay questions state objectives and target material
- strictly enforced page limits (2–8 pages)
- firm deadlines and penalties for late submission

Implementation: Evaluation

Evaluation of written work:

- essay evaluation rubric
- editorial suggestions (progressively less extensive) and individualized comments
- communication through one-on-one meetings (once, 5 min./student)

Benefits to Instructor

The method allows the instructor:

- to structure the course content by aligning course objectives and evaluation
- to build on lectures and past essays ('cranes building cranes')
- to showcase empirical relevance, and applied/policy significance of theory

Benefits to Student Learning

The student is able:

- to improve the writing style
- to demonstrate progression of ideas
- to advance knowledge
- to conduct comparative analysis in group projects
- to build confidence, and hence the method
 - eliminates “cold spells”
 - reduces the possibility of plagiarism

Limitations

The method is not suitable for:

- Large classes with limited teaching resources
 - max. 25 students? (12 students in this case)
- Classes with a **strictly** theoretical focus
 - supplement with exams (final exam in this case)
- Topics with limited contextual continuity

Applications in Other Fields

Contextual continuity is essential for the success of this method

- Context: a tribe, an organism, a continent, a language, etc.
- Continuity: time (e.g., history in evolutionary biology or military history), functionality (e.g., brain in neuroscience or inequality in sociology)
- Contextual continuity is the norm in social sciences, humanities, and natural sciences

Suitable For

The method is suitable for:

- Generative disciplines in which artificial models make predictions about naturally occurring environments (e.g., linguistics, mathematical biology)
- Fields in which evidence is historical, lab experiments are costly, unethical or plain impossible (e.g., sociology, anthropology, evolutionary biology)
- Courses in which context provides critical evidence on competing theories or alternative explanations

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Abstract

I discuss how “writing to learn” within a single context can be integrated into teaching of a theoretical subject, in this case a course on economic theory. While students learn best when they face a concrete empirical challenge, empirical reality is often complex and highly intractable. To promote learning by connecting students with the empirical counterparts of the theories we discuss in the classroom, and to assess learning, I use a single-context approach, in this case a single country. Students choose a country, and research it from a variety of theoretical angles, progressively building on their past assignments. This reduces the cognitive burden on researching a novel context in each assignment. The assessment method integrates structured learning with independent research by students, emphasizes clear and concise communication of results, and includes a mixture of individual and group assignments. Group assignments require students to build on their previously assessed findings. I discuss the key pedagogical ingredients of this approach, demonstrate its tangible benefits on student learning outcomes, and share my thoughts on how the approach can be applied in other fields.