

The Academic Quartet: Creating, Applying, Sharing, Sustaining Knowledge

“Education is not preparation for life; education is life itself.”

— John Dewey



A professor's work is not a collection of discrete tasks but a continuous, socially embedded craft that creates, applies, shares, and models knowledge.

Each task has its own logic, methods and audiences; together they create a virtuous cycle that sustains disciplines, trains citizens, and addresses social problems.

Whether you're a faculty member who wants to clarify your mission, or a department chair designing promotion criteria, or a reader curious about how scholarship translates into public value, you may find this an interesting read.

1. Creating new knowledge: research as disciplined curiosity

At the heart of the professoriate is an imperative to produce new knowledge: theories that reorder what we thought we knew, data that correct or confirm claims, and methods that open new lines of inquiry. This is not novelty for novelty's sake. Robust knowledge creation rests on methodological rigor, replicability, sensible problem selection and an awareness of how new results fit into larger conversations. Practically, this task includes designing studies, securing funding, mentoring graduate students in research techniques, and publishing in peer-reviewed journals. But it also requires what many of us recognize as the quieter virtues of scholarship: patience to pursue incremental progress, humility to revise hypotheses, and the intellectual generosity to build on - and credit - the work of others. **When research is strong, it does two things at once: it advances the discipline internally and it creates reliable resources that other practitioners can trust.**

2. Applying knowledge: scholarship with civic relevance

If research defines the "what" and "why" of knowledge, application defines the "so what?" Translational work - taking theory and data into

practice is a moral & professional responsibility for many professors. This task ranges from partnering with industry on technology transfer, to advising government bodies, to crafting community-engaged research that co-produces solutions with affected populations. Application requires different competencies than basic research: communication with non-academic collaborators, ethical sensitivity to community needs, and a willingness to accept iterative, messy results. Impact is rarely instantaneous: policy cycles, commercialization pathways and social adoption all take time. Still, scholars who neglect the application of their work risk seeing their discoveries remain unread by the people who could benefit most. **A healthy academic career thus blends deep disciplinary work with outward-facing translation, as a pathway through which knowledge achieves societal relevance.**

3. Sharing knowledge: teaching that cultivates thinkers

Teaching is the most visible public face of the professoriate, and it is also fundamentally creative and generative. At its best, teaching transmits not only content but the habits of mind that make scholarly enterprise possible: skepticism balanced by evidence, disciplined argumentation, and the resilience to live with unanswered questions. This third task comprises continual pedagogical renewal - adopting active-learning strategies, integrating digital tools thoughtfully, re-inventing teaching methods in the face of changing student needs, attitudes and resources, and aligning assessments with higher-order outcomes such as critical thinking and ethical reasoning. Importantly, teaching feeds back into research. Classroom encounters surface new puzzles; student projects can become seedbeds for scholarship; and pedagogical experiments generate evidence about how people learn. **Recognizing teaching as a site of intellectual inquiry - not merely technique - elevates its status within the faculty's mission.**

4. Closing the loop: modeling knowledge-making and mentoring the next generation

The fourth task is integrative: ensuring that students and junior colleagues learn how to make knowledge, not only how to consume it. This is mentorship in the broadest sense, and true mentorship traverses research, application and teaching. It requires professors to be reflexive practitioners who can articulate how they choose problems, why they favor particular methods, and how they balance doubt with conviction. By making the tacit practices of scholarship explicit, mentors demystify academic work and create a culture of responsible inquiry. Moreover, integration is forward-looking: it builds capacity. **Mentored scholars become independent investigators, translation leaders, and educators themselves. This multiplier effect is perhaps a professor's most enduring contribution.**

A dynamic, non-linear model

These four tasks are not sequential boxes to be checked. They are dynamic modes of practice that intersect constantly. **Research raises questions that teaching refines; classroom encounters inspire applied projects; applied work exposes new theoretical puzzles; mentorship teaches students to navigate that cycle for themselves.** Academics who cultivate fluency across these modes are better placed to produce durable, societally relevant scholarship. For institutions, this implies assessment cultures that value multiple outputs: peer-reviewed publications, demonstrable public engagement, excellence in pedagogy, and evidence of successful mentorship. For individual professors, it suggests a balanced portfolio - intentionally allocating time and energy across these tasks rather than defaulting to whichever activity promises the quickest reward.

This cycle of creating, applying, sharing and integrating knowledge establishes scholars as creators and translators of ideas, guardians of pedagogy, and cultivators of future intellectual generations. If universities are to remain indispensable to society, the professoriate must hold these tasks in productive tension, and institutions must reward the breadth of work that makes knowledge both deep and useful.