

ECONOMIC SCENE

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Students Discover Economics in Its Natural State

By **ROBERT H. FRANK**

WHY do the keypad buttons on drive-up cash machines have Braille dots? It is an interesting question, since the patrons of these machines are almost always drivers, none of whom are blind. The answer, according to my former student Bill Tjoa, is that because A.T.M. producers make keypads with Braille dots for their walk-up machines anyway, it is cheaper to make all machines the same way. The alternative, after all, would be to hold two separate inventories and make sure that each machine went to the right destination. If the Braille dots caused trouble for sighted users, the extra expense might be justified. But they do not.

Mr. Tjoa's question was the title of one of two short papers he submitted in response to what I call the "economic naturalist" writing assignment in my introductory economics course. The specific assignment is "to use a principle, or principles, discussed in the course to pose and answer an interesting question about some pattern of events or behavior that you personally have observed."

"Your space limit is 500 words," the assignment continues. "Many excellent papers are significantly shorter than that. Please do not lard your essay with complex terminology. Imagine yourself talking to a relative who has never had a course in economics. The best papers are ones that would be clearly intelligible to such a person, and typically these papers do not use any algebra or graphs."

Over the years, my students have posed and answered literally thousands of fascinating questions. My favorite was submitted by Jennifer Dulski, who asked, "Why do brides often spend thousands of dollars on wedding dresses they will never wear again, while grooms often rent cheap tuxedos, even though they will attend many formal social events in the future?"

Decades ago, when I first started teaching introductory economics, it never would have occurred to me to give an assignment like this. The idea grew out of my participation in an early pilot program in Writing in the Disciplines, a new pedagogical movement that promises to revolutionize the learning process at every level. The aim of the program, which was sponsored by the John S. and James L. Knight Foundation, was to encourage students to write about concepts they were grappling with in the various disciplines.

The initiative was inspired by the discovery that there is no better way to master an idea than to write about it. Although the human brain is remarkably flexible, learning theorists now recognize that it is far better able to absorb information in some forms than others.

Thus, according to the psychologist Jerome Bruner, children "turn things into stories, and when they try to make sense of their life they use the storied version of their experience as the basis for further reflection." He went on, "If they don't catch something in a narrative structure, it doesn't get remembered very well, and it doesn't seem to be accessible for further kinds of mulling over." Even well into adulthood, we find it easier to process information in narrative form than in more abstract forms like equations and graphs. Most effective of all are narratives that we construct ourselves.

The economic-naturalist writing assignment plays to this strength. Learning economics is like learning a language. Real progress in both cases comes only from speaking. The economic-naturalist papers induce students to search out interesting economic stories in the world around them. When they find one, their first impulse is to tell others about it. They are also quick to recount interesting economic stories they hear from classmates. And with each retelling, they become more fluent in the underlying ideas.

Many students struggle to come up with an interesting question for their first paper. But by the time the second paper comes due, the more common difficulty is choosing which of several interesting questions to pursue.

The paper is not a complete substitute for the traditional syllabus. But the lasting impact of the course comes mainly from the papers. When students come back to visit during class reunions, the equations and graphs long since forgotten, we almost always end up talking about the questions they have posed and answered during the intervening years.

To answer her question about wedding dresses, Ms. Dulski argued that because most brides wish to make a fashion statement on their wedding day, a rental company would have to carry a huge stock of distinctive gowns - perhaps 40 or 50 in each size. Each garment would thus be rented only infrequently, perhaps just once every four or five years. So the company would have to charge a rental fee greater than the purchase price of the garment just to cover its costs. In contrast, because grooms are willing to settle for a standard style, a rental company can serve this market with an inventory of only two or three tuxedos in each size. Each suit can thus be rented several times a year, enabling a rental fee that is only a fraction of its purchase price.

Daniel Boorstin, the former librarian of Congress, used to rise at 5 each morning and write for two hours before going into the office. "I write to discover what I think," he explained. "After all, the bars aren't open that early." Mr. Boorstin's morning sessions were even more valuable than he realized. Writing not only clarifies what you already know; it is also an astonishingly effective way to learn something new.

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