

In response to this insight, I have found myself ebulliently repeating nearly everything that I have learned through the course to those I encounter. Clearly, the class activities have broadened and deepened my knowledge and understanding of the unique benefits, skills, and experience that a psychology degree offers, not only to aspiring graduate students but also to those seeking a career immediately following undergraduate school.

I truly believe that Careers in Psychology is a vital

and wise addition to the course curriculum. No doubt it will aid prospective psychology students in identifying how they can successfully apply and expand their interests to develop a fruitful and satisfying career. In fact, I think it's safe to say that every degree program, especially those included within the broad discipline of Liberal Arts, would inevitably improve each of their programs with the addition of a similar course.

## **IQI: A Strategy for Facilitating Reading and Discussion in the University Classroom**

Kathleen A. J. Mohr, Assistant Professor of Elementary and Early Childhood Education

Robin Morrow, Elementary and Early Childhood Education Major, Kennesaw State University

### **Instructor's Perspective**

University students and faculty often struggle from two different sides of curricular issues. For example, instructors struggle to find ways to encourage students to read and discuss information from textbooks. Students, on the other hand, often require incentives to read textbooks and to contribute to class discussions. A teaching tactic that I call an IQI addresses both these concerns. This acronym stands for an Interesting Point, a Question to Ponder, and an Important Issue to Discuss. The intent of this activity is to encourage active interaction with the textbook and among classmates.

I initiate the IQI early in the term, especially in classes with 30 to 50 students that include textbook materials that students are expected to read. I explain to students that they will be assigned to a chapter in the textbook and that they are expected to read the chapter and to note interesting items, important issues to discuss, or note any questions that they want to address in class. An alternative to assigning students alphabetically to chapters is to have students sign up for chapters depending on their schedules and areas of interest. Depending on the number of students in the class and the number of chapters in the textbook, three or four students are assigned to each chapter. They can then prepare their IQI items according to the established class calendar. Then, prior to addressing textbook material in class, I call on those students assigned to the chapter to lead discussion using their IQI issues. I include the students' contributions to the IQI as a part of the class participation component of the final grade.

The assignment of an IQI does not guarantee that students read all the chapters in their textbooks, but it does encourage them to read their assigned chapters and to prepare items to discuss. Some students are always more verbal than others and can monopolized class time, unless structures are in place to control discussion time. Other students will remain reticent, unless prodded to partic-

ipate orally in class. However, with an IQI assignment all students must contribute to classroom discussion at least once during the term. Another benefit is that the IQI is an open-ended task that allows students to address topics and concerns from their individual perspectives.

Perhaps the greatest value of the IQI is that it allows me to gain insight about my students. From what they address in their IQI's I can be constantly updated on students' perspectives. Instead of my determining what is important or interesting about the text, the students indicate by their selections what they deem worthy of class discussion. Thus, the IQI helps to maintain and value the students' perspectives on what is read and addressed in class. After several students have brought up their items for discussion, I can add my comments and clarifications, and address anything else that I consider important for students to be aware of in the text. For example, I can mention elements that might be included on course examinations.

I have found the use of the IQI technique to be productive for my students and me. I appreciate hearing their views on the assigned material and welcome the directions that their IQI's have led classroom discussions. Many students have, likewise, expressed appreciation for the technique. This supports my intent to continue to use the IQI in my courses.

### **Student Perspective**

I am a junior, enrolled in a Children's Literature course with Dr. Kathleen Mohr. On the first day of class, Dr. Mohr did the typical first day of class stuff. She explained the course, the expectations, went over the syllabus, and read a few children's books. The course appeared to be similar to any other course: some reading assignments, projects, and a final exam with some weight being given to attendance and participation. I falsely assumed the attendance and participation points would be "freebies" provided you show up for class most of the time. In actually, this

portion of the grade would be dependent on actual participation in class, coming to class, and completing an assigned IQI, (Interesting Point, Question to Ponder, or Important Issue). Basically, each student would be assigned to do an IQI for one chapter out of the textbook, as a way to monitor reading and begin discussions.

I was one of the three students assigned an IQI for chapter one. This assignment seemed easy enough. I read through the chapter, making notes as usual. After I finished, I looked back at what I had written down, and tried to think of what Interesting Point was made by the author, what Question I had about the content of the chapter, and what Important Issue the author brings up. Many ideas came to mind. I chose one of each, and marked them so I would be ready to bring them up in class.

I returned to class ready to share my IQI, but not expecting much discussion or class input. Another student shared hers first. Dr. Mohr spoke very little, mostly to facilitate the discussion. The students contributed to the first student's IQI, and added their own perceptions, understandings, and questions. As the discussion started to die down, I shared my IQI with the class. The same thing happened. The third student shared her IQI. She took the IQI assignment in a unique and interesting direction. She had, completely on her own initiative, created a questionnaire to go along with her IQI. Dr. Mohr happily

handed the "stage" over to her, and allowed her, and the class, to learn more about the text through the worksheet/activity task she had prepared. Finally, Dr. Mohr concluded the discussion by pointing out additional items and answering any remaining questions.

We have now done this process multiple times. Each student brings his/her own knowledge and unique personality to the class through his/her own IQI, as well as responding to those of others. As a result, I think more students are reading the textbook, and thinking about the content. I have been in many classes where students, including myself, did not read the textbook and did fine in the class. In a college classroom, especially with many students, only a select few will contribute to any given discussion. In my opinion, I learn less in these classes, and ultimately, gain little from them. IQI's have been a way to allow varied comments generated by every student at least once.

As a student, I would like to see the IQI method used more often, especially in classes where the textbook is a major source of information. It is nice to hear opinions of all the students rather than just the professor and a few students. The IQI's have made me think about things differently than when I just read the text. I would like to take this opportunity to encourage other professors to implement IQI's and modify it for their own courses.

## Teaching Mathematics from a Chemist's Viewpoint\*

Ronald A. DeLorenzo, Professor of Chemistry, Middle Georgia College

### Introduction

To better appreciate the approaches to teaching math discussed here, it's important to know that I am not a mathematician by profession. I have no special training or academic degrees in math, but my formal education (physical chemistry, Ph.D.) does require a math background. I have been teaching chemistry for about twenty-five years. Three years ago, I was asked to teach Calculus III. Because of my background as a scientist, i.e., as a practitioner of math rather than as a mathematician, my approaches are somewhat different than those of most math instructors.

### Main Goals of the Educational Process

Waterman (1980) and DeLorenzo (1981) state that the main goals of the educational process are to teach students to: (1) communicate clearly, (2) study regularly, (3) master basic math skills, and (4) think logically. The acquisition of these four fundamental skills is more important than the subject matter. In fact, one might profess that the subject matter of many courses serves primarily as a vehicle for the mastering of the four fundamental skills.

For many generations, we as educators have been

trying to insure our species' survival by requiring each new generation to hone various fundamental skills in as many different areas as possible. We firmly believe that this approach will equip future generations with the ability to solve unforeseen problems. We understand that although the majority of specific information will be forgotten, become obsolete, or simply never be used, the basic skills developed in the process will be retained. (Employers are also looking for students who have minds with these capabilities.) In this article, I will show how I attempt to develop in my students communication skills, regular study habits, a basic math proficiency, and a talent for logical thinking.

### Communication

Cipra (1988) reports that David Smith of Duke University lowers one-fourth of his calculus students' grades by one letter because of their writing. Smith tells his students that if they don't write well as professionals, they will lose more than just letter grades. Stacy (1978) revealed that the official view of the American Chemical Society is that the ability to communicate is as important as the knowledge of chem-