

MOTIVATING THROUGH TEACHING IN TODAY'S SOCIAL SCIENCE COURSES

We all share this capacity – capacity to think, and one of my absolute favorite things to do is to watch students think. By “think”, I do not mean trying to remember bits and pieces of material when taking a test. By “think”, I mean when they go deep into themselves – when they either look up or down and almost always become very quiet, for a least a few seconds – and search beyond what is marked as “the known” in their knowledge banks. Whether it is a purely scientific abstraction or an emotive, empathetic extrapolation, for me this always was and always will be one of the most inspiring and moving moments to witness.

When teaching, I want students to let go of their inhibitions and become an active part of the thinking process. Once they are engaged, they usually can recognize and make connections to variations on a problem quickly and easily, whether in the classroom or in life. I use guided learning to encourage independent critical thinking and active participation.

In the classroom I take the role of a facilitator: I work interactively on problem-based learning and use group projects to advance collaboration. For example, in the Research Methods classes, teaching how to code statistical problems in SAS, I would often begin my classes by introducing a problem at first with no explanation. I ask students to describe in their words that the problem is trying to solve, and if necessary, even make guesses. This gives students a chance to think critically and creatively without judgment or penalty for wrong answers. After a few good answers, we would drill down into the details of the problem. I then would present variations on the problem and encourage students to think of alternative ways to arrive at the same solution.

I taught the SAS module for the Graduate Research Methods twice and at the end of each term, I attained a higher than average score as an “effective instructor”. I also taught a SAS-based course in the School of Civil and Environmental Engineering at Georgia Tech (Advanced Statistical Programming CEE8813) during the Spring 2016 and Fall 2017 semesters, and the course evaluations on both occasions were 4.9 out of 5. One may interpret the high score as a sign that I am an easy teacher or that the material is easy. Yet, this is not the case, in fact it is quite the opposite.

The course entails taking and passing two SAS Programming Certification Exams conducted by the SAS Institute. We coordinate with the SAS institute that a certain number of people would be taking a test on a specific date. The school's computer specialists make sure that we can accommodate the technical requirements of a standard test, much like the GRE or GMAT. On the day of the test, the students keep their photo IDs and pencils with them, they can not log into any other software application while taking the test on the computer, and the test automatically shuts off once the time is over.

Despite these highly rigid constraints and a technical nature of the course, the course evaluations were stellar. I was touched by the support and high regard I received from the students at the end of the course. Here are some of their comments: “— I enjoyed the class and your teaching. I appreciate the level of effort you put into us. It was very evident. — I really appreciate your interactive style of teaching and friendly behavior with students. — I really enjoyed your teaching. — I also appreciate your encouragement, patience and nice organization of the class.”

In addition to working in the traditional classroom environment, I have had multiple experiences of one-to-one tutoring, teaching, supervising research work and mentoring. The subject areas in which I guided students ranged from language learning and taking standardized English tests, writing, website management, data collection and management, and research process management. In one-to-one teaching / mentoring context, I rely heavily on providing weekly work structure, while leaving lots of room for open-ended discussions at the end of each weekly meeting. I encourage students to think actively about how they can apply their new skills and knowledge to other courses, interests, communities, or other aspects of their lives. At the initial stages, I often take a back seat in letting the student devise their own “game plan” on how to conduct a research project or solve a problem. Afterwards I engage them in looking at different aspects of their plan / thinking critically and ask to provide alternatives to improve the study plan. I also coach students to develop a clear, on-point, and open communication style and demonstrate how it can help them manage their performance anxieties.

Although my experience up to now has been limited to Statistical Programming and U.S. Government coursework, I am deeply interested in teaching the basic set of Public Policy courses such as Public Policy Analysis, Policy Evaluation, Economics of the Public Sector, and Statistical and Research Methods for Policy Analysis. In terms of the electives, I would like to teach Economic Development Policy, Environmental Policy, Urban and / or Regional Development, Game Theory and or / Microeconomics for Policy Analysis, Strategy and Policy, Comparative Development Policies (industrial, environmental, educational, etc.) In short, I would relish combining and blending together the disciplines in all four broad areas of my own background: Public Policy, Economics, International Relations, and Business Administration.

I believe in teaching by example. One of the most valuable lessons for me as a student came from a professor who took the extra step of deriving all of the formulas from the peer-reviewed articles that were on the syllabus. It was obvious that he took time to work through each formula and it instilled in us the respect for all

the hard work he put into preparing for the lectures and served as an example of how to be thorough, methodical, and persistent. In addition, this insight into the thought process behind the published results was invaluable, both in increasing my understanding of complex concepts and in inspiring confidence in my own abilities. This is what I aspire to pass on to the students.

I enjoy teaching in multi-disciplinary classrooms and with students coming from different professional and cultural backgrounds. For some of the students learning how to code in SAS is easy because they have some prior experience in computing. For others, SAS may be the first and last coding course they would ever take. The challenge for the instructor in such an environment is to enable advanced students further their programming mastery while developing appreciation and solid command of the basic programming concepts for beginners. It is also important to be as clear and concise as possible, and be comfortable with repetition and drilling down through problems multiple times.

At the end, as a teacher I view my role as someone who does not just downpour students with research methodologies and tools. Rather, I emphasize that even a seemingly constrained and predefined mode of reasoning (within statistical software) is yet another way of how to think about and solve problems, whether these problems are purely theoretical in nature or if they are the day-to-day minutiae of running a business or growing a family. I stress the importance of remembering that each scientific and artistic paradigm unlocks a deeper understanding and appreciation to our experience as a civilization, which then and only then moves us closer to each other through different times, spaces, cultures, and progressing together forward.

Анотація. Урманбетова А. Мотивація навчанням в сучасних курсах соціальних наук. У тезах описано педагогічний досвід авторки стосовно мотивації студентів, який виражався у розвитку їхнього критичного мислення та спонукання їх до активної участі у процесі проблемного навчання курсів публічної політики таких як: теорія ігор, мікроекономіка, політичний аналіз та стратегія тощо.

Ключові слова: критичне мислення, активна участь, публічна політика, посередник в навчанні, групи студентів.

Аннотация. Урманбетова А. Мотивация через обучение в современных курсах социальных наук. В тезисах описано педагогический опыт автора относительно мотивации студентов, который выражался в развитии их критического мышления и побуждал к активному участию в процессе проблемном обучения курсов публичной политики таких как: теория игр, микроэкономика, политические анализ и стратегия и т.д.

Ключевые слова: критическое мышление, активное участие, публичная политика, посредник в обучении, группы студентов.

Summary. Urmanbetova A. Motivating Through Teaching in Today's Social Science Courses. There is the author's pedagogical experience in motivating students, which was expressed in the development of their critical thinking and encouraging them to actively participate in the process of problem-based learning of Public Policy courses such as Game Theory, Microeconomics, Political Analysis and Strategy, etc in this thesis.

Keywords: critical thinking, active participation, Public Policy, facilitator in education, group of students

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ЗМІСТ ШКІЛЬНОГО ПІДРУЧНИКА З МАТЕМАТИКИ: ПСИХОЛОГО-МЕТОДИЧНИЙ АСПЕКТ

Навчальні тексти, система вправ і методичний апарат підручника мають враховувати нову мету і завдання шкільної математичної освіти. Важливого значення тут набуває проблема розвитку критичного і творчого мислення учнів, розв'язання якої передбачає дотримання психологічних і методичних вимог при відборі змісту підручника. Пропонуються такі вимоги: врахування особливостей навчальної математичної діяльності, формування в учнів позитивної Я-концепції та стійкої мотивації до вивчення математики; суто математичний та загальнокультурний розвиток школярів; доступність та наступність навчальних текстів; практико-орієнтована спрямованість навчального матеріалу; відповідність змісту віковим та пізнавальним особливостям учнів [1].

Навчальний матеріал підручника має враховувати особливості навчальної діяльності сучасних учнів (народилися, коли інтернет повністю ввійшов до повсякденного життя): краще засвоюють укрупнений, структурований навчальний матеріал, а не громіздкі тексти підручників; краще сприймають