Teaching Portfolio

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Teaching Philosophy

My teaching philosophy is dynamic in nature. Yet, there are some beliefs I have held over the years:

Students most likely accelerate their learning when they feel a tension between what they thought they knew and what they sense or observe they must know. I try to introduce that productive tension whenever possible. It generates intrinsic motivation for learning than the extrinsic motivators such as fear of failure, lowering of grades or lack of praise.

In a class, there may have some students who are less interactive than other so called *smart* students, but extremely intellectual. These students usually don't want to highlight themselves. Consequently, their expressive power doesn't grow. I was also such an introvert student and I understand their philosophy very well. I personally, care these students and try to motivate them in a way that they feel convenient. Eventually, they come out from that state having potential to compete others in every respect.

I tech students as if we are investigating the subject matter together. They quickly realize that they have knowledge already in their heads that simply needs to be uncovered and re-seen. Often I point out my own teaching process—good or bad—or my own teaching dilemmas, and as a class we look them over together.

I believe that both oral and written expressions of a teacher as well as students play an important role in teaching—learning method. I control the speed and clarity of my speech depending on student's facial expression, reaction and the way they throw questions. I believe that if a student is unable to answer a question, the student didn't fail to understand the topic; the teacher failed to make it understandable to him/her. I provide material and experience that takes them beyond what they know to what it is possible for them to know

I believe that expression of thought occurs best when there are real audiences available for this articulated thought. So, I encourage my students to join inter—university competitions. I motivate them to think independently, to explorer their innovative ideas in research work. I am proud of my students Debarshi Kumar Sanyal and Sudeepta Ray who

won the 'Best project award' from Tata Consultancy Services (TCS)' for their project entitled "*Analysis and Optimization of Routing Protocols in IEEE802.15.4*" in 2006.

Teaching Responsibilities and Strategies

My teaching responsibilities are focused on undergraduate and postgraduate education. My teaching assignments are centered on Information Technology/Computer Sc. & Engg. Our courses are framed on a knowledge/research base. I use a blend of lecture, demonstration, discussion and problem solving in my classes. Students are actively encouraged to contribute to discussions and learning activities. I believe in a method of argument and proof using a question—and—answer approach. Substantial use of slides and graphics serves to stimulate discussion.

I have taught the following subjects under undergraduate course:

Course: Bachelor of Information Technology, Strength: 60, Duration: 4 years (8 Semesters)

Theoretical:

Sl. No.	Name	Credit Pts	Semester	Times taught
1.	Operating Systems	3	5th	7
2.	Internetworking	3	6th	4
3.	Object Oriented Programming	3	5th	4
4.	Enterprise Networking	3	7th	2
5.	Web Technology	3	6th	2
6.	Computer Graphics	3	5th	3
7.	Computer Networks	3	6th	1
8.	Digital Circuit and Logic Design	3	3rd	1
9.	Shell Programming	3	5th	1

Sessional/Practical:

Sl. No.	Name	Credit Pts	Semester	Times taught
1.	Networking Lab.	2	5th	2
2.	Internet Lab.	2	6th	3
3.	Object Oriented Programming and Graphics Lab.	2	5th	3
4.	Software Lab-I (Linux Shell Programming)	2	7th	4
5.	Networking using OOP Lab.	2	6th	3
6.	Web Technology Lab.	2	6th	2
7.	OS Application lab.	2	5th	3

Although my focus is undergraduate education, I have also taught following subjects under postgraduate courses:

Course: Master of Software Engineering, Strength: 45, Duration: 2 years (4 Semesters)

Theoritical:

Sl. No.	Name	Credit Pts	Semester	Times taught
1.	System Programming in Linux	3	1st	1
2.	Object Oriented Software Engineering	3	2nd	1

Sessional/Practical:

Sl. No.	Name	Credit pts	Semester	Times taught
1.	System Programming in Linux Lab.	2	1st	1
2.	Object Oriented Software Engineering Lab.	2	2nd	1
3.	Distributed Software Systems Lab.	2	2nd	2

Course: Mobile Computing and Communications, Strength: 20, Duration: 2 years (4 Semesters)

Theoritical:

Sl. No.	Name	Credit Pts	Semester	Times taught
1.	Wireless and Mobile Protocols	3	1st	1

Representative Course Syllabi, including Assignments, Examinations, and Supplementary Reading

Advising

In every class, I announce to students that my door is "always open." In addition to maintaining office hours, I meet with students regularly. My aim is to equip them with tools to find answers for themselves in addition to relying on my suggested solutions. I have been continuously serving as a "coordinator" to "JU-TCS Collaborative program on Software Engineering". I have also chaired many undergraduate theses.

Evaluation of Teaching

Student evaluations are vital to my efforts to improve courses. I routinely request anonymous written student assessments at the conclusion of courses. Following questions were asked to the students on the subject Operating Systems. The result is shown in Figure 1

Table : 1

Item	Teaching	Item	Subject Matter
1	Lecture was A) Highly Stimulating B) Stimulating C) Not stimulating	7	Work load of the subject A) Heavy B) Normal C) Light
2	Subject coverage was A) More than adequate B) Adequate C) Inadequate	8	Relevance of the subject in relation to the understanding of the major field A) Highly relevant B) Relevant C) Irrelevant
3	Presentation of the lecture was A) Very clear B) Clear C) Not clear	9	Prerequisite, if any A) Very essential B) Essential C) Not essential
4	Whether questions from students were A) Encouraged B) Evaded C) Discouraged	10	Availability of text book A) Readily available B) Available C) Not available
5	For understanding the subject attending the class was A) Very essential B) Essential C) Not Essential	11	Coordination between subject covered and exam/tests A) Good B) Fair C) Poor
6	Objective of the course was A) Fully realized B) Partially realized C) Not realized		

Figure 1: Written Comments Analysis Grid
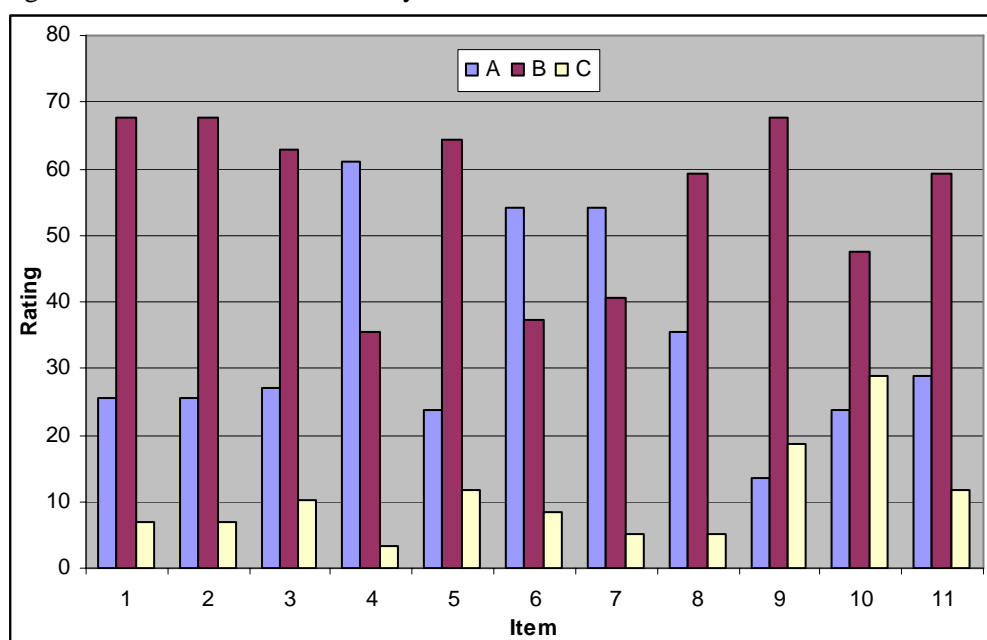
Teaching Improvement Activities

I believe that all teachers should seek continuous renewal and growth. I work sincerely to improve my knowledge base and instructional methodologies. I attended following courses that briefly identify my efforts:

- "17th UGC sponsored Orientation Program", organized by University Grand Commission, Academic Staff College, Jadavpur University, India, 20th August, 2007 to 17th September, 2007.

- "Retraining of teachers on E-learning", organized by University Grand Commission, Academic Staff College, Jadavpur University, India, 16th November 2007 to 17th November 2007.

Conclusion

I often reflect on how fortunate I am to have found a profession that provides a multitude of personal and professional rewards. I feel elated when I meet former students who express genuine appreciation for my teaching, advising, and general support as they take aim at distant goals. I derive great pleasure from the challenge of designing a new component to a course and witnessing the nods and expressions of understanding on the faces of my students.