

The Transition from Private Life to Academia: Advice for the New Instructor

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Abstract

The most common route to becoming a faculty member develops from the successful completion of an advanced degree which affords a natural transition to faculty status. This path provides ample opportunity to develop the necessary skills and organizational tools to begin life in the academic world with a minimum amount of anxiety.

A less frequent path taken is a transition from private enterprise into the academic world. The daily work requirements facing individuals in private enterprise vary greatly from those facing the educator. The occupational skills necessary for excellence in teaching include the organization of various types of diverse information, the development of engaging visual aids, development of good oral presentation skills, interaction between and coordination with peer educators, as well as many others. Often these skills must be refined in the first few semesters to ensure skillful instruction.

The process of organizing all of the necessary information often detracts from the development of the other skills necessary for success. The types and volume of information that must be tracked and maintained in the initial period of course development and acclimation to the new environment can be overwhelming.

This paper presents ideas to help the new educator develop systems to track all the daily, weekly and semester requirements that he may face in the early part of his career. In addition, the methods used to collect and maintain information serve as an aid to the future refinement of course materials in subsequent semesters. Suggestions are made from the writer's personal experiences and examples of sample spreadsheets are given to aid in the organizational process.

Several topics pertinent to the new educator are examined, including 1) how to prepare for the initial move onto campus, 2) developing a smooth transition from previous instruction, 3) building on prerequisite coursework, 4) database development for class rosters, attendance records and grades, 5) coordinating your lesson plan with external schedules, and 6) coordination within your lesson plan including reading assignments, homework assignments, examinations, laboratory exercises, etc..

Introduction

“How many students are in my class?”, “Where is the classroom?”, “What is a recitation period used for?”, “Where can I find a stapler?”, “What have I gotten myself into...?”

Maybe you’ve heard or even asked these questions yourself. The beginning of a teaching career for a new faculty member who is transitioning from private employment is a daunting task. Many of the procedures and inner workings of academia are not known to those in the “outside” world, so acclimating to the new environment can be difficult. The success in the early days of teaching is determined less by the subject matter presented and more by the ability to manage the activities of the class effectively ^[1]. One of the most challenging aspects is simply organizing all the information the instructor must control while also ensuring there is adequate time to develop the skills of an effective teacher.

Many resources exist for the new faculty member to aide in developing and organizing lectures and presentation materials, to assist in formulating a grading scheme or to work on interpersonal skills. Common texts encountered include Lowman’s *Mastering the Techniques of Teaching* ^[2], Wankat’s *Teaching Engineering* ^[3] and McKeachie’s *Teaching Tips* ^[1]. While all of these volumes support the development of teaching skills, none appear to address the subject of time management to the extent required for organizing my courses.

My life prior to academia involved working as a registered professional engineer for several years in the petrochemical industry. A compulsion towards organization (a malady afflicting many engineers) was vital to my success as an engineer and helpful in the move into academia, but at times the transition was somewhat overwhelming. The development of tools to organize both time and resources was a necessary ingredient for my success as a professor. Simply ensuring adequate lecture material had been prepared in advance of a lecture was a significant concern, not withstanding the volumes of other information to maintain and organize. Through the development of a series of spreadsheets, I was able to reduce the cacophony of information to a dull roar. I hope the following information will serve you to some extent in the pursuit of a restful mind.

Preparing For the Move to Campus – The Process Begins

Coming from private industry, a new faculty member is often faced with the additional task of relocating, possibly from a long distance. This challenge brings its own set of organizational problems (selling/buying a home, arranging financing, maintaining communication with all parties during the move, dealing with movers, etc...) which must be confronted in the midst of tackling questions of how to become an effective instructor. Several steps can be taken prior to the move that may ease some of the burden.

One of the initial problems on campus is simply locating buildings and rooms. The interview allows one to become familiar with the location, at least enough so that a campus map will make some sense. Obtaining a campus directory prior to the move can be greatly beneficial. Usually the campus directory has a relatively current campus map. Prior to arriving on campus, commit

at least a reasonable degree of time to studying the map for important offices. I suggest at a minimum locating the following offices and keeping a record of at least one valuable contact in each office. Record phone, fax, address and email information for each contact.

Your department

While you may have seen it when you interviewed, refresh your memory. Also note the other departments that are in the same building. The best contact is probably the department office assistant. They know office procedures that will help you expedite requests in the beginning of your career.

Information Technology

This office will set up email accounts, teach you to log in, familiarize you with software and inform you of network policies. Having this ability immediately upon arrival will be very useful. They may also be responsible for technology in the classroom, which in today's environment can be a formidable prospect. Knowing the electronic capabilities of standard and special classrooms will be important for instructors intending on using common presentation software such as MS-Powerpoint.

Benefits / Human Resources

Knowing who to contact and where the office is will be invaluable in the first few weeks when finalizing benefits documentation.

Print Shop

In private industry, the norm is to copy everything in house. It is likely your department will want you to send large print jobs out whenever possible to save money. Turnaround time for print jobs may also be important in planning your weekly tasks, which is covered in a later section.

It is a good idea to have a university email account set up before arriving. This will allow you to forward copies of pertinent email you receive while employed in the private sector to your new position. Having it in your new account when you arrive on campus will serve as a reminder of issues you need to address.

Developing a Smooth Transition

Often students have some preconception of what to expect in a subject, most likely learned from upperclassmen that have already taken the course from a previous instructor. Some courses may require radical restructuring, but most often a modest change (at least for the first semester) is more desirable.

Obtain a copy of the previous syllabus for each course you will teach if it is available. ABET accredited colleges should have substantial records available for review. Study the syllabus to see which concepts you should review and have fresh in your memory at the beginning of the term. Have copies of textbooks sent to you so you can review key course concepts and prepare at least a few lectures for the first week of classes.

How many pages of notes translate into one-hour of lecture? My own experience indicates three to five pages are adequate, depending on the level of detail you provide when preparing the

lecture. In the beginning, produce more than you need. You can always finish an incomplete lecture or provide a handout during the next period.

Data Organization

Two basic types of student data must be maintained: class grades and possibly attendance. This is easily managed with a simple spreadsheet. In classes where team projects are anticipated it is beneficial to assign team numbers and document the information on the roster. A simple, self-explanatory example of a blank form is given in Figure 1 below.

ID#	Team	Last Name	AKA	First Name	HOMEWORK							LAB / FIELD EXERCISE						EXAMS			PROJ		OTHER		SUMMARY																
					1	2	3	4	5	Total	1	2	3	4	5	Total	1	2	Final						Class average	Projected Grade	Final Grade														
					Percent of total grade																																				
					Possible score																																				
1																																									
2																																									
3																																									
4																																									
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29																																									
30																																									

COURSE #	
COURSE NAME	
ROOM	
DAYS	TIME
CREDITS	

Figure 1 – Class Roster

Coordination within the Lesson Plan

Time management is a field which has evolved rapidly in the computer age, in part out of necessity from the increasing pace of the business world. Successful implementation of a personal management system ensures efficient use of time allowing one to succeed in career endeavors while providing ample free time for personal business. The structure of the system must not be so cumbersome or inflexible to discourage its usage, and must focus on achieving personally satisfying results, not simply managing time ^[4].

Several types of discreet tasks are performed by the instructor, including: preparing lectures, lab handouts, lab equipment and homework assignments; grading homework, quizzes, exams and

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projects; assigning reading, projects and homework; performing lectures and labs; and collecting assignments.

While this list may seem trivial to the seasoned instructor, the variety of activities may not be apparent to someone who has never functioned in the academic environment. Indeed, when discussing this paper with a tenured faculty member, he indicated that a calendar was sufficient. At first I was troubled that maybe the subject of this paper was not worthy of discussion. Maybe my time management issues were not shared by others. Conversations with colleagues revealed similar organizational difficulties for other new professors.

The tenured professor had taught his core classes many times affording a sense of confidence that first-timers lack. He likely had prepared standard notes for each of his core classes, and probably had some form of lecture notes for most of the other courses offered by his department. For someone with this level of experience, the organizational techniques that I proposed were pointless, and a calendar probably was sufficient.

I needed a tool to identify and distribute work activities each week until I had developed and refined my own course materials. Several revisions were necessary before arriving at the current version of the Weekly Task Sheet seen in Figure 2. This form grants an instructor the ability to look at an entire week of coursework, determine times of overload and redistribute assignments to level the workload. It proved to be an invaluable tool during my first term teaching.

				Week of 9/22/03					
				9/22	9/23	9/24	9/25	9/26	
CET 0020	Description	Carry Over	Mon	Tue	Wed	Thu	Fri	Sat/Sun	Forward
1	Lec 8 8:11-19	Prep		Do					
2	Lec 9 9:1-6		Prep						Do 9/30
3	Lab 6 Level Loop			Collect	Grade	Return			
4	Lab 7 Turn Horizon	Prep		Do		Do			Collect 10/7
5	Lab 8 Vert angle			← Prep		Do			Collect 10/7
6	Lab 9 ???								Next week
7	HW 3 Ch 4/5/6					Collect	Grade		Return 9/30
8	HW 4 CH 8/9				Prep	Assign		Note 1	Review 9/30
9	Read 9 9:1 to 6			Assign					
10	Read 10 9:7 - 11					Assign			
11 - Ungraded assignment. Prep HW solution handout for review on 9/30									
12 - Exam next week on 10/2 (Thursday)									
CET 1152	Description	Carry Over	Mon	Tue	Wed	Thu	Fri	Sat/Sun	Forward
13	Lec 7 Scheduling	Prep	Do						
14	Lec 8 Scheduling			Prep	Do				Do 9/30
15	Rec 4 CPM Diagram			Prep	Do				Next week
16	HW 2 Bid Estimate	Grade			Return				
17	HW 3 Labor Estimate				Collect			Grade	Return 9/29
18	Read Chap 6				Assign				Assign 9/29
19 - Exam on 10/8 (two weeks)									
20									
LEC = Lecture HW = Homework FNL = Final RD = Reading LAB = Lab EX = Exam PRJ = Project ANN = Announcement									
Prep Assign Grade Handout Due Do Collect Return Note #									

Figure 2 – Weekly Task Sheet

Having worked for years in the construction industry, the concept of resource management was commonplace to me. The efficient completion of any construction project requires judicious scheduling and allocation of available resources [5]. I was the only resource available, and my success hinged on appropriately allocating my time to ensure completion of all the necessary tasks of my new position. Ironically, the concepts I was currently teaching to students in Construction Management were directly applicable to my new situation.

Some examples of how the Weekly Task Sheet can be utilized are summarized below.

1. Resource leveling – Looking in the column for a particular day, one can quickly identify all the tasks that must be completed for that day. This provides the ability to evaluate an entire week beforehand and re-assign preparation activities to move tasks from overloaded periods. In Figure 3 there are three major activities planned for Wednesday: grading Lab #6, preparing Lab #8 and preparing Homework #4. This arrangement required more work-hours than were available. Preparation of Lab #8 needed to be re-assigned. The format of the sheet allows for quick assessment of alternative dates. Other than collecting some papers and performing lectures and labs, no other office tasks are scheduled for Tuesday. It is also easily seen that two preparation tasks were left from the weekend and may need to be completed on Monday. Based on this information, Tuesday is the optimal choice for the re-assignment of preparing Lab #8. While explaining the process takes several minutes, the actual evaluation process is very fast.

			9/22	9/23	9/24	9/25	9/26		
CET 0020	Description		Mon	Tue	Wed	Thu	Fri	Sat/Sun	Forward
1	Lec	8 8:11-19	Prep	Do					
2	Lec	9 9:1-6	Prep						Do 9/30
3	Lab	6 Level Loop		Collect	Grade	Return			
4	Lab	7 Turn Horizon	Prep	Do		Do			Collect 10/7
5	Lab	8 Vert angle			← Prep	Do			Collect 10/7
6	Lab	9 ???							Next week
7	HW	3 Ch 4/5/6				Collect	Grade		Return 9/30
8	HW	4 CH 8/9			Prep	Assign		Note 1	Review 9/30
9	Read	9 9:1 to 6		Assign					
10	Read	10 9:7 - 11				Assign			
11	1 - Ungraded assignment. Prep HW solution handout for review on 9/30								
12	2 - Exam next week on 10/2 (Thursday)								

Figure 3 – Resource Leveling

- Assignment flow – First fill in the date the assignment is given to the class. Backtrack to fix the preparation date. Identify when to collect, grade and return the assignment. One can quickly determine if the assignment cannot be returned by a key date. For example, look at Homework #4 on Line 8 of Figure 4. The homework was to be assigned on Thursday. Preparation was then set for the previous day. Review of the task sheet for the next week indicated there was not be ample time to grade and return the homework before the exam. A note was entered to prepare a handout solution sheet for this homework to make sure there was adequate review before the exam.

			9/22	9/23	9/24	9/25	9/26			
CET 0020	Description		Carry Over	Mon	Tue	Wed	Thu	Fri	Sat/Sun	Forward
1	Lec	8 8:11-19	Prep		Do					
2	Lec	9 9:1-6		Prep						Do 9/30
3	Lab	6 Level Loop			Collect	Grade	Return			
4	Lab	7 Turn Horizon	Prep		Do		Do			Collect 10/7
5	Lab	8 Vert angle			← Prep		Do			Collect 10/7
6	Lab	9 ???								Next week
7	HW	3 Ch 4/5/6					Collect	Grade		Return 9/30
8	HW	4 CH 8/9				Prep	Assign		Note 1	Review 9/30
9	Read	9 9:1 to 6			Assign					
10	Read	10 9:7 - 11					Assign			
11	1 - Ungraded assignment. Prep HW solution handout for review on 9/30									
12	2 - Exam next week on 10/2 (Thursday)									

Figure 4 – Assignment Flow

- Flow between task types – Plan the reading, lecture, homework and lab assignments so there is a natural flow between tasks (i.e. – reading first, lecture, homework/lab after lecture, etc...). In Figure 4 above note how the reading assignment for Chapter 9 (line 9) was scheduled on Tuesday prior to the homework assignment for Chapters 8 and 9 scheduled for Thursday (line 8). This tool is particularly useful when coordinating between two classes. For example if an instructor wishes to incorporate Spreadsheet skills taught in one class in a homework assignment the next week in another class.
- The last column is reserved for carrying forward tasks that have been postponed, or noting items that must be concluded in a future week. For example, if an assignment has already been collected and graded, a notation is made of the date in the next week to return the graded assignment. Note in Figure 4 there are several references in the last column that identify collecting and returning various assignments.
- At the end of the week, one can evaluate each task, carry it forward to the next week if necessary and plan for the next week. I usually reserved this task for Friday afternoon to determine if I needed to work during the weekend or not. Once the blank sheets are printed, this task only takes about 15 minutes.
- A note section at the bottom of each course block allows for important notes that may affect the schedule, such as information regarding field trips and class demonstrations.
- Task action words appear at the bottom of the sheet to help standardize terminology and allow the user to quickly understand what action is required for each task.

Coordination with External Schedules

At the start of the semester, I produce a Course Organization Sheet as appears in Figure 5. This spreadsheet allows an instructor to plan ahead within a single course, coordinate with other schedules and document what actually happens throughout the term. Other potential uses are:

- Providing a record for a future review of the course and improvement in flow and assignment scheduling.
- Allowing for planning of assignments around holidays, semester breaks, etc.
- Identifying key dates early in the semester, such as final presentations or withdrawal deadlines.
- Coordinating with other courses, as necessary.
- Documenting development and improvement.

Date	Lec#	Title	Read	HW#	Due	Return	Lab#	Due	Return	Other	Due	Return	Comments		
T 8/26/03	0	Introduction / Syllabus	1, 2, 6:3												
H 8/28/03	1	Overview / Field notes	6:1-13				1	9/2/03	9/4/03	X			Lab1: Pace length		
T 9/2/03	2	Linear measurement / Taping	9:4-5				2	9/4/03	9/9/03	X			Lab2: Set traverse / Referencing		
H 9/4/03	3	Errors	3	1	9/8/03	9/11/03	3/4	9/9/03	9/11/03	X			Hw1: 1-6,10 2-5b,6a,13,18 6-2.5,6,12 Lab3: Pace traverse, Lab4: Taping		
T 9/9/03	4	Error theory / Statistics	5:1-14, 4:6-15				5	9/16/03	9/23/03	X			Lab5: Tape traverse		
H 9/11/03	5	Error theory / Statistics	7:1-9	2	9/18/03	9/23/03	6	INC					Hw2: 9:2.5,6,12 5-9 Handout		
T 9/16/03			8:1-10				6	9/23/03	9/25/03	X			Lab6: Differential leveling		
H 9/18/03	6/7	Horizontal angles / Magnetic effects	8:11-19	3	9/25/03	9/30/03	X						Hw3: 4-4 5-7,15,31,34 7-5,10,16,33,36		
T 9/23/03	8	Traverse azimuths/bearings	9:1-6				7	START					Lab7: Closing the Horizon		
H 9/25/03			9:7-11	4	NA	NA	7/8	10/7/03					Hw4: 8-12a,13c,17,21,22,23,32,38 (not collected) Lab8: Vertical angles		
T 9/30/03	9/10	Zenith angles / Exam 1 review													
H 10/2/03				5	10/9/03	10/14/03	X	9	START		Ex1	10/2/03	10/7/03	X	Ex1: Chapters 1 thru 8 Hw5: 9-9,10,12,15,23
T 10/7/03							9	10/14/03	10/16/03	X				Lab9: Interior Angle Traverse (EDM)	
H 10/9/03	11	Traversing	10:1-5												
T 10/14/03			10:6-17	6	10/28/03	11/4/03	10	START					Hw6: 10-2,6,7,9,10		
H 10/16/03	12	Traverse Azimuths/Bearings					10	11/18/03	11/20/03				Lab10: Angle Traverse w/Distances (Total Station)		
T 10/21/03		GPS Demonstration													
H 10/23/03	13	Latitude/Departures	16												
T 10/28/03			12				11	START					Lab11: Planimetric Survey		
H 10/30/03			12				11/12	START					Lab12: Topographic Survey		
T 11/4/03							12	12/4/03	12/8/03						
H 11/6/03	14	Area calculations	17												
T 11/11/03	15	Mapping	21	7	11/18/03								Hw7: 12-1, 3,4,18,22		
H 11/13/03	16	Boundary surveys	23												
T 11/18/03	17	Construction survey / Exam 2 review													
H 11/20/03		Work on contour maps		8						EX2			Hw8:		
T 11/25/03		Work on contour maps													
H 11/27/03	HOLIDAY														
T 12/2/03		Work on contour maps													
H 12/4/03		Final exam - field test								Oth1	12/4/03	12/8/03	Oth1: Collect Field books / Contour maps		
T 12/9/03		AM 12:30-2:30 / PM 3:00-5:00								Final					

Figure 5 – Course Organization Sheet

Conclusion

Early in my working career, I realized a “one-size-fits-all” approach to organization did not result in good morale. Each individual must develop a system that they can understand and use effectively. Some people function best in an apparently chaotic environment. Further study often reveals they have their own system of organization that truly makes sense to them.

Experienced instructors may view these organizational topics as common sense, but the nature and timing of work activities in the academic environment varies significantly from the private sector. A system of controlling information during the transition helps to ease anxiety and allow time for refinement of skills directly related to classroom activities.

During the revision cycle of this paper I noticed that several aspects of my system that I considered critical during my first-term already appear to be unnecessary. The personal management system the reader chooses should be continually evolving as the instructor learns and grows. The goal of this paper was to identify several issues that new faculty may encounter and give an organizational example that might elicit ideas to help develop a system of their own.

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Biography

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