# **Established Customs: Changing Roles in Departmental Culture and Impact on New Faculty**

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**Abstract** – As requirements for tenure change with a new emphasis on balancing research and teaching, the addition of new faculty members brings about adjustments for both the students and the department. The success of new faculty members in the classroom is dependent on skills such as technical proficiency, organization, and interpersonal rapport with the students. However, establishing interpersonal rapport with a student body is a daunting and challenging task, not wholly under the influence of the new faculty member. Based on past expectations, departments inherently have established customs regarding timing and structure of homework, exams, projects, student feedback, and one-on-one interactions. Based on these inherent customs, student expectations may differ greatly from the new engineering educator's class management procedures. As a result, interpersonal rapport may suffer and the new faculty member may experience negative feedback simply because change has occurred. Other senior faculty should be cognizant of this potential for mismatched expectations and actively and publicly provide information and support for the new faculty member. This contribution will discuss examples of established customs that the authors observed followed by a discussion of strategies and advice on maintaining interpersonal rapport while preserving credibility and learning standards.

Keywords: Established customs, new faculty, interpersonal rapport

## Introduction

The introduction of a new faculty member into a department and into the classroom brings about change. The focus in engineering education is on teaching the new faculty member to be a good learning facilitator. However, one key aspect of success, establishing good interpersonal report with students, is not wholly under the influence of the new faculty member. Established departments inherently have developed customs regarding timing and structure of: homework, exams, projects, student feedback, and one-on-one interactions. Often these customs were established when the emphasis of the institute was on education rather than research. Based on these inherent customs, student expectations may differ greatly from the new engineering educator's class management procedures. As a result, interpersonal rapport may suffer and the new faculty member may experience negative feedback simply because of change.

It is important for established senior faculty in the department to be cognizant of this potential for mismatched expectations and actively and publicly provide information and support for the new faculty member. The reasoning for this is three-fold. Since the new faculty member was probably hired to positively influence the growth of the department, this growth is hindered if the new faculty member simply adheres to existing customs. Secondly, with increasing emphasis in academia on research, new tenure track faculty must carefully balance teaching and research to succeed. Thirdly, exposure to a variety of learning environments is beneficial to the professional development of students. Introduction of a new member into the faculty team inevitable brings adjustments; however implementing

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this change can be made smoother if the established senior leaders in the department help with the transition and embrace the change.

This contribution will discuss examples of established customs that the authors, as new faculty members, became aware of, followed by a discussion of strategies and advice on maintaining interpersonal rapport while preserving credibility and learning standards. In addition, this paper strives to be a resource for senior faculty to assess positive and negative impacts of engrained customs on not only the students, but also on new faculty. A discussion of topics is presented that significantly impact a new faculty member's first teaching experience at an academic institution. Unfortunately these issues were not found to be addressed in teaching workshops. The goal of this manuscript is to open a dialogue on unspoken practices in engineering departments in view of changing emphasis of faculty responsibilities. Open discussion will likely aid both the new faculty member and senior faculty in making the transition smoother.

## **Change in Engineering Education**

Numerous books and articles have been written to help new faculty adjust to the overwhelming responsibilities of academia [1-8] offering advice on: course preparation [8-12], enhancing student learning [7, 9, 12], time management techniques [8, 13], and developing an effective research group [8]. If we consider the approach of industry to staffing their work force, a new employee is hired not only on the basis of technical skills, but also on a perceived fit with the company. Mentors are often assigned to help the new employee understand the corporate structure and culture to more effectively conform. However, unlike industry, where the mission and products are well focused to ensure the growth of the company, academia caters more to individuality and new ideas to foster growth.

In general everyone including students tend to like routines because of the associated comfort level. Any new professor brings new ideas and techniques to a department, and as a result, is likely to experience student and / or faculty resistance to change. In addition, if the new professor does not fit the traditional image of the department, some students may also question credibility. Unfortunately, to the new faculty member, this can be perceived as outright hostility from the students [7].

## ESTABLISHED CUSTOMS

A typical scenario that a new professor might encounter usually occurs during the first semester teaching. New Professor X will enter the classroom on the first day of class with a well-prepared syllabus that includes the policies he or she preferred as a student along with a teaching philosophy that was developed after attending engineering education workshops. These policies are explained to the students during the course introduction. However, as the semester progresses, new Professor X begins encountering challenges that were never mentioned in any of the engineering education workshops attended. This contribution provides a 'behind the scenes' examination of several of these challenges. After analyzing each challenge, an outline of suitable strategies to maintain interpersonal rapport while simultaneously preserving credibility and learning standards is provided.

## **Homework Grading Practices**

As a first semester teaching assignment, New Professor X was assigned a senior capstone class with almost 60 students enrolled. Dr. X decided on assigning bi-weekly homework sets consisting of 5 to 6 problems, which were intended to challenge the students to apply their knowledge from the class and the textbook. Class time consisted of a lecture that included an instructor-led example, culminating with a student-focused class activity to apply the concept in small groups. Textbook readings were assigned prior to each class so that the students would be prepared to engage in classroom discussion on the topic for the day. Committed to providing timely feedback to the students on important concepts, new Professor X would spend the week in between assignments feverishly grading student papers to return the next week. Since this was a capstone design class, the new professor expected students to have the maturity to learn from the previous week's homework comments and apply them to the current homework assignment. Failure to learn from previous week's comments resulted in decreasing homework scores. As the semester progressed, the students began complaining that they didn't understand what the new professor expected of them.

One day the new Professor X overheard some students praising senior Professor Y who had previously taught the capstone course. Senior Professor Y was nearing retirement, was no longer involved in research, and thus carried a heavier teaching load of five to six courses each year. This represented a significant number of required courses taught in this department, so most students had previously taken one or more classes from Professor Y. This reinforced Professor Y's methodology and students developed the perception that this was the way courses should be taught in the department. Based on student evaluations, the department culture was to regard Professor Y as an excellent educator. Although new Professor X had discussed aspects of the capstone course with Professor Y, examples of previous homework and their timing were not openly exchanged. Further investigation on the part of new Professor X revealed that the previous homework assignments consisted of 1-2 problems which were due the following class period. Professor Y would immediately grade these, staple solutions to the back, and discuss the problems in the next class period. In this environment, students were told exactly what their mistakes had been at beginning of each class, avoiding the need to refer to their graded homework sets.

Once new Professor X understood that the students were accustomed to this homework style, reinforced in several of their required courses, it became clear why the current homework assignment structure was not popular. Because the department culture had developed in which students relied on Professor Y to put them back on track within a day or two, they now gave up when attempting longer assignments with only biweekly feedback.

This case study highlights a difference in expectations that has developed for new, tenure-track professors. With current pressures to conduct research and publish results, it is neither possible nor advisable to grade homework daily. From the perspective of new Professor X, conforming to the existing homework custom in the department is simply not possible. One strategy that works when faced with this situation is for new Professor X to explain this to the class, emphasizing that the new structure garners beneficial skills for the students. Professor X can also begin conducting a special help session at a convenient time for the students. This approach is extremely popular and attitudes toward less frequent homework can improve.

Discussions with other new faculty at various institutes reported similar disconnects, sometimes perceived positively and sometimes negatively. In another case, a new faculty member was assigned a similar capstone course previously taught by a senior member of their department. In this scenario, although the students respected the senior faculty member, they expressed concern about not receiving feedback on their homework until the end of the semester. Often the students reported taking final exams with no data on their performance that semester. In this case, the student body and department perceived the senior faculty member as performing below expectations, so the new faculty member was informed of the students' complaints. Because information was readily available regarding deficiencies with the senior faculty member, students embraced the teaching style of the new faculty member.

In both scenarios, the new professor's interpersonal rapport with students is highly dependent on the student's prior experiences with senior faculty in the department. Students naturally compare instructors and their response to change can be either positive or negative. For this reason, student evaluations and feedback are not wholly under the influence of the new faculty member. Senior faculty can more effectively mentor new faculty by openly discussing this phenomenon with them.

## **Exam Logistics**

In the same 60-student senior capstone class, new Professor X had planned out 7 twenty-minute exams held during class. The rationale was based on the merits of shorter, more frequent exams to give students multiple opportunities to demonstrate mastery of course material while simultaneously providing frequent feedback. At the end of the semester, the teaching evaluations indicated that the exams were considered too frequent and too rushed. In response to this feedback, three full class exams were scheduled the following year. Student feedback still indicated that the exams were too rushed and too stressful, even though some students were able to completed the exam well before the end of class time.

Discussions with other faculty in the department elucidated that the departmental culture was to hold evening exams so that students were given as much time as they wanted to solve a problem. The exam ended when the student was unable to write down anything else or was too exhausted to continue. Some students had embraced this and came to

exams less prepared because they "could figure it out during the exam". These students performed below average on fixed time exams and blamed their poor performance on the instructor, not on their preparation.

Once new Professor X becomes aware of differing exam expectations, he or she can structure the course to provide assistance to help students acclimate to a new exam structure. The revised structure would provide exam learning objectives, practice exams, advice on study strategies, and encouraging students to read Rich Felder's Random Thoughts Essay, "MEMO: To students who have been disappointed with their test grades" [14]. In an ironic twist, recent energy saving practices on this campus (turning off heating at 5 pm) has resulted in phasing out evening exams to save energy.

# Office Hours and Accessibility

New Professor X had also put considerable thought into what would be the most effective and convenient time for office hours for the students. This had included looking up a number of student schedules to determine time conflicts and to ensure that office hours were held the day before homework due dates and exam schedules. However, the new professor quickly discovered that students rarely used the office hours. Instead, they would knock on the door twice and stroll into the office whenever was convenient for them.

Examining the department culture revealed that the senior Professor Y, who was no longer involved in research, proudly promoted an open door policy. Thus the students developed the perception that faculty were accessible to students at all times. Students had come to think of senior Professor Y as a friend who actively encouraged students to stop by "just to chat". Although new Professor X initially enjoyed having a positive interpersonal rapport with the students, (s)he soon discovered that entire days could go by without having a moment to write or even to eat lunch! If this pattern persists, it could be detrimental to the performance of the new faculty member regarding current tenure expectations. Furthermore, a department suffers when new faculty do not succeed in research and scholarship because the department, college, and university lose the considerable investment (monetary and otherwise) that they made in the new faculty member.

A similar example occurred in another department where the culture was to employ student graders to assist faculty members. Unfortunately this policy was never conveyed to new faculty members who assumed the extra effort of grading assignments. In this case, the senior faculty member who had previously taught the course delegated all homework questions and grading to a graduate student in the department. The students in the course were accustomed to utilizing their fellow-student for help and would regularly bypass the new faculty member with questions. Because there was no interaction between the fellow-student and the new faculty member, the students reported an inconsistency in the material presented and grading. In addition, after this student graduated, the undergraduate students did not understand why this resource was removed and blamed the faculty member for not providing resources to help them understand the course material.

Graduate students as well as new faculty need to receive credit for their efforts. An open dialogue at the departmental level would ensure fair allocation of student graders to all faculty in the department while simultaneously alleviating both the graduate student and the faculty member being put in awkward and detrimental positions. In both cases, the main issue results from a communication gap where students are misinformed or unaware of the true constraints under which a new faculty member must function. This also shows up in student evaluations where students become accustom to senior faculty telling them that the evaluation forms serve no purpose. In all cases, the students respond to their environment. One faculty member reported an increase in faculty evaluations after explaining to the students that since (s)he was untenured, the evaluations played a crucial role in his / her retention at the university in a teaching capacity. Once the students understood the role they played for future classes, the ratings improved dramatically.

In general, students are oblivious to the demands on faculty time in addition to the evaluation criteria. In most cases, forthright communication with the student can solve a majority of complaints. For example, new Professor X can initiate a discussion on what comprises the demands of new faculty members including writing proposals, managing graduate students to perform research, writing papers, reviewing papers, reading literature, and presenting at national conferences. Tying this back into the technical development of the faculty member and the reputation of the institution can help undergraduate students see why they benefit from faculty research activities. New Professor X can now ask students to help by taking advantage of office hours and emailing to make an appointment for other

times. New Professor X can expect that teaching evaluations may reflect a decrease on the accessibility section, but the added benefit of avoiding time fragmentation can far outweigh the criticism of office hours.

# Departmental Support and Rapport

As expectations on new faculty change to reflect current balances between teaching and research, new professors are required to actively promote the development of updated faculty – student interactions. Research-focused, new faculty members will likely approach interactions with students in a slightly different fashion than senior faculty members who concentrated on teaching. In addition to this responsibility of changing culture, new faculty members are also in a position where they are simultaneously proving themselves to colleagues and establishing credibility with the students. If the new faculty member is a minority in his or her discipline, this process can be more difficult due to social biases [15].

Accommodating change can be made easier if the reasons behind student perceptions of senior faculty are evaluated prior to hiring new faculty members. While departments tend to evaluate negative feedback from students and relay this information, evaluation of positive feedback can unfortunately be ignored. Evaluation by the department on students' positive response to interactions with senior faculty would establish a dialog on changing expectations and provide resources for optimal success of the new professor.

Additionally, there can exist a vast difference between departmental support of faculty members. Senior faculty members may not realize that the support provided by the department isn't consistent with similar departments either at the same institution or at other universities. Because support is an aspect of departmental culture, discrepancies are not perceived by senior faculty members as unfair or unusual. However, varying dispersal of resources can be perceived by new faculty members as an indicator that department standards aren't universally applied. As many departments employ an advisory board comprised of faculty from other universities, this avenue may be used to evaluate the universal dispersal of support to offset the perception of unfair standard customs.

The dispersal or transfer of information should also be considered a resource. Knowledge is extremely valuable. Those who are familiar with a custom or have advanced knowledge or input into a policy have a considerable advantage over those who are ignorant on the subject. Senior faculty can help by making a special effort to include new professors in informal discussions around the water cooler. New faculty should also pursue or initiate informal discussions on customary practices in the department.

## SUMMARY

A new member of a departmental faculty team brings adjustments. With proper mentoring and open dialogues about existing customs, this addition can positively influence the growth of the department and the professional development of students. New faculty, with the added responsibility of increasing emphasis in academia on research, must balance their time between teaching and research. This contribution discussed examples of established customs and strategies to resolve mismatches that will help a new faculty member maintain interpersonal rapport while preserving credibility. Simultaneously, these examples may be a resource for senior faculty to assess positive and negative impacts of engrained customs on not only the students, but also on new faculty. The dialogue on unspoken practices presented here will likely aid both the new faculty member and senior faculty in making the transition smoother. Established senior faculty who are cognizant of this potential for mismatched expectations can provide information and support for the new faculty member, while simultaneously educating students that change can be good.

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