

Work Environments Are Critical for Maximum Productivity in Teaching and Research Efforts in Animal Sciences

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Abstract

Whether one is a faculty member, a staff member, or a student, your productivity is directly tied to the atmosphere of the department. Work environments are perceived differently, but if any individual work environment is one in which teaching and/or research activities are “taken for granted,” a general tone of negativity will “rule,” and morale will be low. Consequently, both teaching and research efforts will suffer. Alternatively, if both teaching and research activities are encouraged and rewarded, the general mood of the department will be optimistic. Bottom line: if one is periodically encouraged for the job that he/she is doing, and is treated with respect, it is likely that both teaching and research efforts will be superb.

Introduction

A previous article in this journal described the evolution of a young assistant professor to a tenured faculty member and independent educator (Dodson, 2001). From the time that the paper was published, until the present, circumstances have prompted the writing of this paper. For example, the young associate professor is now a full professor, has had numerous undergraduate and graduate students pass through the department and move on to “the real world,” and has developed an idea of what it takes (complete with departmental distractions) to be a successful, well-rounded, balanced faculty member in animal sciences. In addition to his own personal experiences, numerous mentoring papers have been published that highlight how work environments play an important role in one's productivity (Reiger, 1995; Johnsrud and Rosser, 2002; Jacobs, 2004; Jacobs and Winslow, 2004). What has received less coverage in the literature is how a faculty member is actually a component of a multi-faceted team (Clark, 2005). While other faculty members, national and international collaborators, and other laboratory visitors are important, of immediate consequence is the local academic team, consisting of undergraduate and graduate students, post-doctoral researchers, and laboratory technicians. The focus of this paper is

to demonstrate that each member of the academic team experiences different perceptions of the collegiate environment, and how their perceptions of their environment influence their academic productivity. For brevity, this discussion is limited to a faculty member, a research staff member and a graduate student.

Normal Academic Duties

Academic work is challenging, and it takes a special type of a person to be successful in an academic setting (Jacobs, 2004). Not everyone has the propensity to handle academic life. From dealing with workplace crises, to chores like grading papers, academic life requires flexibility, consistency and dedication (Jacobs, 2004; Jacobs and Winslow, 2004). Whether it is a faculty member, a staff member or a student, each experiences daily challenges in a different manner.

Faculty. A faculty member usually expends considerable time in the maintenance of a viable research program. This challenge involves knowing the scientific literature, being a successful grant writer, and being an efficient and productive manuscript writer. Commonly, the faculty member is considered successful by maintaining a viable research program with considerable grant support. Research, however, is only one challenge of a faculty member's life. A viable faculty member must also be a solid classroom instructor; advise students and sometimes parents (McArthur, 2005; Vivian, 2005), and perform service activities for the department or university (Jacobs 2004). It is common for a faculty member to distribute some of the daily “chores” to research staff members or to graduate students (Malveaux, 2004). By doing so in a balanced manner, a faculty member may avoid becoming fatigued/burned-out (Jacobs and Winslow, 2004).

Research Staff (Specifically Research Technicians). The normal duties of a research technician include performing experiments, collating data, and writing papers. Moreover, in a university environment, this person also often functions as a both leader/supervisor and teacher/mentor of

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students. On a daily basis, this staff member is looked upon as the all-knowing person who, in the absence of the faculty mentor, addresses any questions about classes, research, writing, and even general life principles. Because the academic world can encompass both office and laboratory settings, teaching moments may occur anytime, anywhere amidst the daily quest for answers to research hypotheses. The research staff member has the opportunity to expose the student to specific practical skills and hands-on techniques. Knowledge obtained in a research laboratory often augments, expands upon, and clarifies classroom lecture material.

Graduate Student. A graduate student is often pulled in many directions, physically, mentally, and emotionally (Grant-Vallone and Ensher, 2000; Reisberg, 2000). Many students have not yet learned to budget their time correctly and often find themselves having to be in two places at once. As more of the student's time is filled with classes, teaching, grading, and studying, less time is spent in the laboratory. Unfortunately, this is often where the student learns the most, and for a research degree like an M.S. or Ph.D. in Animal Sciences, it is results in the laboratory that determine whether the student gets a degree. A student is also required to focus on several tasks simultaneously, all requiring much of the mental faculties of the student. It is requisite to learn the literature of the field, correctly design and perform experiments as well as interpret data from the experiments, and write and edit manuscripts (possibly several at one time). The student's class work must remain in the forefront as exams, homework, and reading assignments pile up quickly. Although it is no longer necessary to obtain a solid A average, a basic minimum grade point average is required of all graduate students, even if on a research track. Further, a teaching assistant on a departmental stipend (Malveaux, 2004) is also required to know the material that is being taught, even if it is not in their area of expertise.

Duties in a Stressful Environment

In a negative work environment, daily challenges may be compounded, and perhaps made impossible to complete (Jacobs, 2004; Jacobs and Winslow, 2004). It is unfortunate, but many professors in animal sciences tend to be micromanipulators and want to control all aspects of academic life. However, this breeds a reluctance to share responsibility as well as accolades. As such, individuality reigns over the "team" concept. Strong individuals get more done and attract more notice from upper administration than non-forceful faculty members. In many departments, there is segregation of students, staff, and faculty members, leaving one to question how anything gets finished (Jacobs, 2004; Jacobs and Winslow, 2004). Combined with the evolving idea that everyone must be accountable for their time, collegiality is often dropped at the expense of generating "beans" for

administrators to count. Stress results from segregated academic departments, and one often wonders how the unit even holds together (Jacobs, 2004; Jacobs and Winslow, 2004).

Faculty Member. Stress is a key word for all faculty members, especially for new Assistant Professors. However much one thinks is accomplished each day, something always comes up that disallows one to leave work at the end of the day in a peaceful mood (Jacobs, 2004). Whether it is additional work imposed by an administrator at the last minute, class preparation commitments, or meetings with students, work issues "tag-along" when one walks out the door to go home (Jacobs and Winslow, 2004). Occasionally, daily events provide breaks from the perceived stress. Manuscript/grant acceptance notices, laboratory successes, student epiphanies, or other successes all provide temporary relief from the constant pressure of a stressful work environment. In reality, however, the demands for productivity usually rise (Jacobs, 2004; Jacobs and Winslow, 2004; Lee, 2005). Grants that are funded are never sufficiently large to satisfy the administration and manuscripts are (often) never published in journals with high enough impact factor.

Research Staff Member. In a stressful environment, everyone suffers. In a work environment plagued with negativity, lack of respect, inconsistencies, and miscommunication, general morale falls and productivity wanes in both research and teaching. For the laboratory staff member, stress can emanate from many sources including unrealistic time deadlines, pressure to get data for publications, unsuccessful experiments, insufficient research funds, student-faculty clashes, and lack of respect and communication within the department. Some of these workplace stressors are normal components of a research environment. However, it is the ongoing pressure of chronic and unresolved stress that takes a toll on initiative and mental health.

Graduate Student. A negative, stressful working environment is equally taxing on the student. As the emphasis to publish more papers and get more grant money on the faculty member increases, likewise the stress on the student increases. While usually not required to write grants, most graduate students are under increasing pressure to generate data quickly and efficiently, often with dwindling monies. Many times, the student is still mastering laboratory techniques and is slow to produce results. Mistakes are inevitably made and the student is reluctant to reveal their error for fear of the faculty member's wrath. Fear of making a mistake is a great stress indeed. In this unconstructive environment, the student's creativity and freshness begin to dull. New techniques, ideas, and perspectives are often not welcomed by the stressed faculty member, and "pushing the envelope" is often interpreted as a "challenge to their authority" by the graduate student. Additionally, graduate students

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are under the pressure from other obligations. Teaching assistants working in this type of environment often do not feel they have the support of either their major advisor or the professor for whom they are functioning as a teaching assistant. The student's major advisor resents the extra demands on the student's time and pushes the student to spend more time performing experiments in the laboratory. Concurrently, the faculty member for whom the student is acting as a teaching assistant releases some of his workload and places it on the student. Lastly, the student must perform well in their classes. In a negative environment, anything less than an A is seen as a blemish, yet faculty members are unsympathetic to the time demands required to make the top grade.

Duties in an Optimistic Environment

In an open, encouraging environment, daily challenges become easier, and productivity may rise. As a student or research staff member gets more accomplished, then the faculty member makes more progress towards solving a research problem. Furthermore, as more research is accomplished, then the lines of communication are open and efficiently operating at all levels. Students and faculty members are more confident and secure in their research standing, which will result in better attitudes towards undergraduate students and graduate students during classroom periods (Jenkins et al., 1998).

Faculty Member. The ideal departmental environment for a faculty member might include a scenario in which members of the department celebrated the successes of others, without feeling personally threatened or reacting rudely (Johnson and Indvik, 2001). Everyone would be working towards the collective good, which means placing students first and themselves last (Dodson and Lyda, 1998). Instead just striving for personal fame, a faculty member might look for opportunities to recognize the work of other department members (faculty, staff, students). Such an optimal work environment might include ideal class sizes, the development of more efficient teaching/research tools, and the perception that what one does during any particular day impacts someone else in a meaningful manner. Further, a successful career does not mean having to work extremely long hours (Dodson, 2001). Productivity usually goes up when one is rested (Dodson, 2001; Allerton, 2003).

Research Staff Member. A major daily challenge for research staff members is to facilitate an open and encouraging atmosphere in the work environment. Of paramount importance in building high morale in the laboratory is the respect factor, which optimally operates as a "trickle down" concept. First, the faculty member institutes the concept of respecting others' individualities, opinions and space while still unifying the group in a common commit-

ment to his specific research goals. The staff member then practices and teaches this concept in communicating and interacting with undergraduate/graduate students, and other staff and faculty members of the department. In turn, students working in the office and laboratory environments learn the respect factor through observation and actual practice which can translate into simply coming to work in a timely manner, turning in assignments when scheduled and being consistent in their laboratory efforts. Rudeness, back stabbing, gossiping and similar negative practices all undermine the respect factor and should not be tolerated in any workplace.

Graduate Student. An ideal environment would facilitate the student's job of learning. In an open and welcoming situation, the student would be praised for ingenuity in the laboratory. This type of environment is also conducive to increased productivity from the student. Fear of making a mistake and dread at being berated for "not understanding the simplest thing" would be replaced with an atmosphere of support and an understanding of the learning process and the journey that the student must take to arrive at the answers. In a positive environment, faculty members would be unfettered from the, sometimes overwhelming, pressure of producing of grants and papers, and would be able to concentrate on the student and the student's learning would be paramount. In this utopia, the faculty member could polish the "diamond in the rough" and the student would shine as burgeoning scientist.

Summary/Conclusions

The correct work environment allows those choosing to become an academician to become more academic. Students are usually caught in a nebulous world where they are neither true peers nor true students. Much like the teenager who is required to act like an adult, but is not an adult, students are asked to behave like peers but are not peers in anyone's eyes. Mentoring by both a strong faculty member and a research staff member will allow students to become more successful and productive, which in turn will allow those who interact with the student to advance (research advances or teaching efficiency). Professional research technicians are a vital member of any academic team but are often-times viewed as a surrogate faculty member. Performing research at the direction of faculty members, laboratory staff already have their hands full. Added to this is the responsibility of overseeing graduate students in the laboratory. Friction and distractions will cause the professional technician to lose patience and focus. Faculty members are supposed to be omniscient and omnipresent. They function in numerous capacities to maintain research, teaching, and service components in a university/college setting. The job does not stop at 5:00 pm. Successes by graduate students, professional staff members and other academic team

members should be viewed by faculty members as avenues for making progress, which will allow the faculty member to be less stressed. A faculty member with less stress will be a better teacher in the classroom. Better teaching boosts knowledge and creativity in students. In all cases, teaching, learning, working, and productivity all seem to thrive in an environment of mutual respect.

Literature Cited

- Allerton, H.E. 2003. Not funny ha ha. *Training + Development* 57:87-88.
- Dodson, M.V. 2001. Being a balanced teacher. *NACTA Journal* 45 (4):41-45.
- Dodson, M.V. and C.M. Lyda. 1998. Place students as top priority in academia. *Oregon Science Journal* 14:1-2.
- Clark, R.E. 2005. Research-tested team motivation strategies. *Performance Improvement* 44:13-16.
- Grant-Vallone, E.J. and E.A. Ensher. 2000. Effects of peer mentoring on types of mentor support, program satisfaction and graduate student stress: A dyadic perspective. *Journal of College Student Development* 41:637-642.
- Jacobs, J.A. 2004. The faculty time divide. *Sociological Forum* 19:3-27.
- Jacobs, J.A. . Winslow. 2004. Overworked faculty: Job stresses and family demands. *Annals of the American Academy of Political and Social Science* 596:104-129.
- Jenkins, A., T. Blackman, R. Lindsay and R. Paton-Saltzberg. 1998. Teaching and research: Student perspectives and policy implications. *Studies in Higher Education* 23:127-141.
- Johnson, P.R. and J. Indvik. 2001. Rudeness at work: Impulse over restraint. *Public Personnel Management* 30:457-464.
- Johnsrud, L.K. and V.J. Rosser. 2002. Faculty members' morale and their intention to leave. *Journal of Higher Education* 73:518-542.
- Lee, C. 2005. Clear and present danger. *Training* 42:4.
- Malveaux, J. 2004. Do graduate students get a fair deal? *Black Issues in Higher Education* 21:34.
- McArthur, R.C. 2005. Faculty-based advising: An important factor in community college retention. *Community College Review* 32:1-19
- Reisberg, L. 2000. Student stress is rising: Especially among women. *The Chronical of Higher Education* 46:A49.
- Rieger, B.J. 1995. Lessons in productivity and people. *Training and Development* 49:56-58.
- Vivian, C. 2005. Advising the at-risk college student. *The Educational Forum* 69:336-351.