

ELEMENTS OF A SUCCESSFUL UNDERGRADUATE STUDENT RECRUITING PROGRAM

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ABSTRACT

The four elements that are key to the successful recruiting program at Virginia Tech are described. These elements include financial and philosophical support from all levels of administration, maintaining a positive relationship with academic counselors in the University Studies programs, developing a "Students Recruiting Students" program, and strong faculty involvement. The result of the recruiting program has been a quadrupling in the undergraduate enrollment in the last 4 years. The long-term health of undergraduate programs in wood science and forest products curricula worldwide will depend on sustaining this high level of recruitment.

Keywords: Recruiting, student enrollment, education.

INTRODUCTION

The recruiting program in the Department of Wood Science and Forest Products at Virginia Tech was initiated in 1991 as a response to declining enrollments in undergraduate wood science programs here and across North America. As illustrated in Fig. 1A, the last 12 years have seen a substantial decline in undergraduate enrollment in wood science and related disciplines, and many programs have not been sustained as a result. The outcome of the recruiting efforts at Virginia Tech is shown in Fig. 1B. This diagram indicates that the undergraduate population grew from only a handful of students at the beginning of the recruiting program in 1991 to over 100 in only a few years. This is quite a success in view of the grim national statistics of just a few years ago (Bowyer 1991; SWST 1992; Lyon et al. 1995). The breakdown by class at Virginia Tech is almost equal across the four classifications, with freshmen at 23.5%, sophomores 30%, juniors 27.5%, and seniors 19%. Two undergraduate options are offered at Virginia Tech. Students in the option called Wood Products are 51% of the total, and those in the Forest Products Marketing and Management

option are 49%. In the beginning of the recruiting program, most of the students were enrolled in the marketing and management option; but in the past few years, there has been an equal distribution between the two options.

KEY ELEMENTS

After a few years of experimentation, we have identified four elements that are key to the recruiting efforts at Virginia Tech. The first is to have the support of all levels of administration: departmental, college, and university. It is not enough to simply infuse money into the program; it is crucial to have the philosophical support of the decision-makers and career counselors. While at first reading this may seem trivial, it is not at all. With declining enrollments prevailing around the world, it has been difficult to convince administrators to support efforts to bolster a "sinking ship." But with a little effort and preliminary data, it is possible to demonstrate positive results and garner the support of those who decide the future of programs.

The second key element has been to cultivate and maintain a positive relationship with career and academic counselors within our

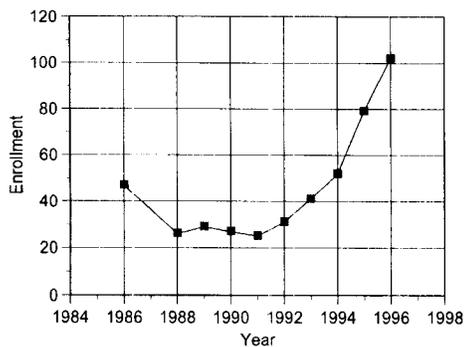
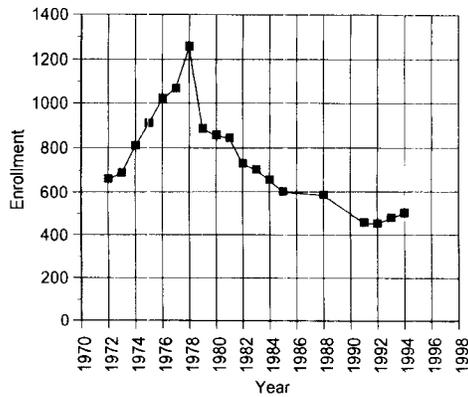


FIG. 1A. Undergraduate enrollment in Wood Science and Technology (WS&T) curricula in North America from 1972–1994, from Lyon et al. (1996). The numbers include separate WS&T curricula, forest product options, minors contained in forestry, and closely allied programs administered by wood science and forestry departments, such as building construction. The numbers do not include pulp and paper science students.

FIG. 1B. Undergraduate enrollment in the Department of Wood Science and Forest Products at Virginia Tech, Blacksburg, VA, from 1986–1996.

college and around the university. Those students who have declared an academic major in Forestry and Wildlife Resources are assigned a faculty member in their discipline as an academic counselor. For those students who have not chosen a major, it is possible to enroll in a general program called University Studies. Students are not allowed to graduate from this program but are required to declare a major by the time they achieve junior standing. While enrolled in University Studies, these students have an academic advisor assigned to

them who is charged with preparing the students for their eventual major and career.

Interested faculty and students regularly meet with the counselors in the University Studies office and inform them about our program and any changes that have taken place since the last meeting. At these meetings, we discuss the courses needed to transfer into our department, the courses the students are required to take for graduation, and most importantly, the career opportunities upon graduation. After learning about our program and the attractive career options, the academic counselors are very enthusiastic in encouraging students to transfer into our program. We also guest lecture in the course on choosing a college major and give interested students a tour of our research facilities. Establishing and maintaining the positive relationship with University Studies have been very fruitful for obtaining transfer students.

We have also cultivated a positive relationship with the academic counselors within our own college. Their office has taken an active role in guiding prospective students our way, in providing literature and information, and including our department in recruiting and informational sessions. Having people in the Counselors' Office that are supportive of our program has made a significant difference in the number of prospective students we meet with and the number that eventually transfer into our program. On average we get six to seven students per year through referrals from the academic counselor in our college. This number is increasing each semester. As the word about career opportunities is spread across campus, many more students who are interested in transferring into our program come to our offices.

The third key element is an effort called "Students Recruiting Students." Ifju (1996) has briefly described this effort in his recent editorial in *Wood and Fiber Science*. In this program, a graduate student is responsible for coordinating mailings, organizing tours and private meetings, staffing the recruiting office, attending recruiting and informational ses-

sions, and coordinating with the academic counselor and faculty within the college. The graduate student is given the title "Recruiting Coordinator" and receives a modest financial award (\$1,000 per semester in addition to any regular stipend received). The coordinator has access to departmental resources including photocopying, telephone and mail services, and the use of the computer facilities in the recruiting office. A visible office near the main department office was created specifically for the recruiting efforts and is staffed by the graduate student recruiter. The recruiting coordinator also has the ability to hire undergraduate students to assist with staffing the office, mass mailings, and personal phone calls to interested students. Further details on the Students Recruiting Students efforts are outlined by Schmidt (1997—submitted to *Forest Products Journal*).

There are two mass mailings per year. The first is a full-size folder sent early in the fall semester to high school guidance counselors in Virginia and Maryland. Maryland high schools are included because we have a common market agreement that allows Maryland residents to pay in-state tuition if they are enrolled in one of our programs. Included in these packets is a full-size folder that contains specific information about the faculty, facilities, degrees, departmental programs, the university and environs, course requirements, student activities, employment opportunities, recreational activities, interesting facts about wood, information about each undergraduate option, and how to apply to our program. Also included in the packet is a number of response cards for the guidance counselors to give to their students to use for requesting more information about our program. When these cards are received back in the recruiting office, the interested student receives a letter and the full packet of information; and in about two weeks, the prospective student receives a phone call from either the recruiting coordinator, an undergraduate student, and/or a faculty member. It has taken several years to see results from these mass mailings. The mass

mailings to high school guidance counselors started in summer 1992, and in this fall 1996 semester, we have the largest freshman class in the last decade. While the folders in the mass mailings are very expensive to print, to prepare, and to ship and the personal phone calls and second mailings are very time-consuming, the results are starting to be very profound in the number of freshmen enrolled in our program.

The second mass mailing is to students who are already enrolled in Virginia Tech but who have yet to declare an academic major—those in the University Studies program. This mailing consists of an informational letter, brochures describing each of the two options we offer, and an invitation to meet with us and tour our facilities. This mailing takes place in the spring semester. A second mailing is sent to these undecided students later in the spring semester which consists of the full packet described above that is sent to guidance counselors and another letter. About two weeks after the second mailing, a personal phone call is made to each student. In the past, this was our most successful recruiting effort and remains very productive. We typically get about five students each year from University Studies, primarily through the mailings and the advice from the academic counselors.

The graduate student recruiting coordinator is also responsible for attending local high school career fairs and university recruiting sessions around the state. Attending high school career fairs just started in 1996. Recently, a faculty member, the recruiting coordinator, several undergraduate students, and an industry manager attended a career day at one of the local high schools. At a typical recruiting session, the faculty and student recruiters are usually asked to make a brief (20-minute) presentation about the program and then staff the information booth for several hours. Since we just started attending high school career fairs, the results are uncertain but, in general, we believe that this effort will produce positive results in a 2- to 3-year pe-

riod. The current undergraduate students in the department are very enthusiastic about their college major and are interested in attending the recruiting sessions. Their enthusiasm and commitment are sensed by the high school students and should prove beneficial to our enrollment numbers.

The fourth key element in our recruiting program is the involvement and solid commitment of the faculty and the administration. The recruiting efforts of individual faculty are as diverse as the faculty members themselves. They include teaching classes or describing our program and career opportunities at local schools, church and youth groups, 4-H meetings, community organizations and clubs. On-campus efforts include meeting with prospective students, guest lecturing, and attending information sessions sponsored by our college or the university. On average four to five meetings are held each semester with prospective students, and three to four guest lectures are given in natural resource or related classes.

Much of the recruiting effort of the faculty is highly personal attention given to a prospective student, including one-on-one encounters at meetings, after classes, or in office visits and tours of our research laboratories. These personal visits and tours are very time-consuming but perhaps the most productive and rewarding of all the recruiting efforts listed. At the meetings with individual students, we generally discuss the course requirements, try to interest the prospective student with the attractive career market, the productive, interesting nature of the curriculum, and the diversity of options and concentrations available to them in the curriculum. Even though the program has quickly approached over 100 undergraduate students, we still maintain a high faculty-to-student ratio and a personal interaction level not afforded by other programs at a large university such as Virginia Tech. When the students are asked what caused them to transfer into our department, they often reply first with "the personal attention, the size of the classes, it sounds interesting" and then later

respond "the strong possibility of a rewarding career upon graduation." Even after our program and the career options have been described at great length, the most often-asked question at these meetings is "What kind of job can I get?"

Another very productive effort by the faculty has been to coordinate the introduction to renewable natural resources class (F100 introductory class) by a member of our department. This faculty member gives a majority of the lectures in the class and then has several guest lectures from our department throughout the semester. This class is required for all first-year and transfer students in our college, and is also very popular throughout the campus. Approximately 150–200 students take this class in the fall and 125–150 in the spring. The majority of the students in the spring semester class are from outside our college and are simply interested in the subject matter; often they are interested enough to transfer into one of our college programs as a result. In the past, one to two students transferred into our program each semester as a result of this introductory class. However, this number is increasing each semester.

RECRUITING AND RETAINING WOMEN AND MINORITY STUDENTS

The percentage of women enrolled in our program has risen slightly as the enrollment has increased; however the percentage of minority enrollment has not significantly changed. When the recruiting efforts were started, there were two women students in about thirty. Today there are fifteen in one hundred two (15%) and only one minority student. Recently, a woman faculty member and a minority faculty member have joined the department.

Programs that have been effective in recruiting and retaining women and minority employees in industry include the following:

- well-developed initiatives and rewards for those doing the recruiting
- career development programs for women and minority individuals

- formal and informal mentoring programs
- increased awareness that all people respond in unique ways to performance requirements, supervision, testing, classroom environments, and social events, and that each person has unique needs, i.e., one size DOES NOT fit all
- high potential individuals in leadership and mentoring roles
- a workplace "comfort zone" in which all individuals are accepted as equal; they are not completely isolated and alone; they will not be harassed, made fun of, or scared; they will receive help if they need it; and they are made to feel welcome and comfortable.

In general, these methods have been used in businesses and industry, but all of them can be molded and used successfully in the educational arena if the faculty, staff, and students are committed to increasing the enrollment of women and minorities in wood science curricula. All large universities and some smaller colleges have offices specifically devoted to diversity, equal opportunity, and student life issues. These offices provide a wealth of information on recruiting and retaining women and minority students. In addition, there are several very good publications that regularly provide information related to women and minority work/learning place issues. A few examples of these magazines and journals are: *AWIS Magazine*, Association for Women in Science, 1200 New York Ave. NW, 6th Floor, Washington, DC 20005, 800/886-1947; *On Campus with Women*, Association of American Colleges and Universities, 1818 R St. NW, Washington, DC 20009, 202/387-3760; *Women in Natural Resources*, Bowers Lab, University of Idaho, Moscow, ID 83844-1114, 208/885-6754; *Workforce Diversity*, Equal Opportunity Publications, Inc. 150 Motor Parkway, Suite 420, Hauppauge, NY 11788-5145, 516/273-0066. Equal Opportunity publications also include *Minority Engineer*, *Woman En-*

gineer, *Careers & the Disabled*, and *Independent Living Provider*.

OTHER POSSIBILITIES

It is possible for industrial partners and employers to contribute to the recruiting efforts through summer jobs, co-op employment, and internships as well as sponsoring scholarships for students. It doesn't take a large scholarship to help students; as little as \$500 can make a marked difference to a struggling student. In fact it can be the difference between continued enrollment, transferring to another program, or dropping out altogether. Industrial trade associations can contribute to recruiting and program health through collaboration with the universities and through their members. They can generate demand projections that are often required to secure administrative and political backing.

Currently there are several other successful recruiting efforts being undertaken, such as Mississippi State University's Wood Magic Science Fair (Connors and Seale 1996) and the University of British Columbia's Strategy for Renewal and Growth (Barrett and Cohen 1996). The current enrollment statistics and the recruiting efforts of the universities in the United States that offer wood science and pulp and paper science programs are summarized in the publication "Evaluating Careers and Functions in Wood Technology" (Anonymous 1996). The enrollment statistics indicate that in the fall of 1993, approximately 485 students were enrolled in wood science and technology programs and 1,410 in pulp and paper science programs. Females comprised slightly more than 13% of the wood science students and approximately 24% of the pulp and paper science students. Additional recruiting ideas as well as ways industry can contribute are presented in this paper. The recommendations include more involvement in recruiting by alumni, systematic and aggressive visitation schedules to high schools and junior colleges by faculty-student-industry teams, and regular participation at career fairs with ample litera-

ture to describe the advantages of wood science careers. Placement rates of students in forest products careers nationwide are reported to be 80%, and it is felt that this could be even better if more wood science graduates were promoting the programs with the industry. It is also indicated that along the Eastern Seaboard where 75% of graduates emerge, there is a potential demand of six positions for each graduate.

It is clear from the success of the various recruiting programs that with positive and committed support from all levels of administration, referrals from career advisors, individual and collective faculty efforts, and a program such as Virginia Tech's "Students-Recruiting-Students," it will be possible to reverse the declining enrollment trend and recover from the crisis in wood science and technology education.

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