How the grading system works - theory and practice

by Lisa Hall

The grading system used by the University of Alberta has always taken a fair amount of criticism, and has been getting a little more than usual lately. The concerns focus mostly on the allowance for different marking procedures in each faculty, resulting in major differences in Grade Point Averages and top marks from faculty to faculty.

Dr. Fred Seyer, a Chemical Engineering Professor, did some research into the distribution of marks in some faculties. He found that some faculties were giving what he considered an overabundance of high marks.

Education seemed to be the guiltiest party. "Their marks stuck out like a sore thumb," said Seyer. Looking into old statistics from the Registrar's office, he learned that in third-year Education courses, 70 percent of the students received a seven or better. Meanwhile, 40 percent of the students taking third-year Engineering courses had a seven or higher. These statistics were from the early 1980's, but marks since have been comparable.

Seyer thought of a few possible reasons for the contrasts, and the most logical one was that the Education marking system has lower standards than Engineering.

Seyer took his information to *Alberta Report*, and in February, the magazine ran a story, hoping to draw some attention to the problem.

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Seyer's major concern was that students in faculties with a tendency to give lower marks would be short-changed when it came to scholarships. He feels faculties like education, that tend towards higher marks, do a disservice for both students in their own faculty and those in other faculties.

By giving out a large number of high marks, no one stands out, said Seyer. "People that are the true high performers are penalized." It makes giving scholarships "like throwing names into a hat."

However, since the *Alberta Report* article was published, the Faculty of Education hasn't been jumping to pull up their socks and make changes. Instead, it defends itself, and with reason.

In 1986, because it had been under a great deal of criticism, the Faculty of Education decided to take a look at its marking system. A committee was formed, led by professors Taylor and Paterson. A year was spent comparing the marks and distribution of the different departments of Education to each other and to other faculties.

Paterson said that they found "a difference (in marks) compared to some faculties, but they were not significantly different to others." There were no major differences within Education departments. "Overall we found fewer discrepancies than were talked about," said Paterson.

The committee prepared a report and made recommendations to the faculty. A few departments are now reviewed every year to make sure there are no great differences in marks.

"We don't tell our professors how to mark, though," said Paterson.

So, while Engineering's Seyer suggests that Education has easy marking standards and therefore its students get first crack at scholarships, Education's Paterson assures "our grades reflect what's there."

There seems to be a problem of opinion.

The problem could be the result of several factors, and one of them is the overall grading system at the U of A. During the 1965-66 session, the General Faculties Council adopted the nine-point grading system. Also included in Section 61 of the GFC Policy Manual was a suggested distribution of marks for freshman classes. This distribution was based on the actual distribution of marks from the previous year, but it was never mandatory.

Some faculties adopted the suggested distribution for their courses; others did not. Some created their own marking system. A natural result of this would be a variation in marks in each faculty, since no strict distribution of marks was given by the GFC.

So it is neither Education's or Engineering's fault for the difference in their marks.

In 1985, the suggested distribution was taken out of from Section 61, giving faculties even less information on which to base their marks.

As it is now, GPA's in second and third-year Engineering courses usually come in at 5.9 and 6.0, respectively. For the same year courses in Education, the GPA's are usually around 6.7 and 7.1.

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Other faculties generally range between this, and the overall University average for second and third-year courses is 6.4 and 6.7.

From this it seems that Engineering marks are further below the average than Education's are above. But the case of the inconsistency cannot be blamed on any individual faculty, but again on the University's lack of control over the different grading systems. Section 61 states that the main purpose of the system is "to achieve a more uniform distribution of marks than had existed in the past between different courses and between different sections of the same course, so that there would be a reasonable degree of comparability between the marks in the courses."

The old system, which used percentages, must have been incredibly inconsistent if a range from 6.0 to 7.1 is considered "uniform".

Basically, the consensus of the faculties is that their major concern is to keep the marks even within their own faculty and not with those of other faculties.

Dr. Peter Smy is Chairman of Electrical Engineering, and his duties include monitoring the grades in his department. Smy was also Associate Dean in the mid-seventies and helped to create a marking system in his faculty, which appears to be among the strictest. With this system, the class average of each course (with more than 30 students) should lie between 5.0 and 6.5. In adjacent sections of one course, the difference in the mean of the lowest and highest sections cannot be more than 0.8.

"The reason is that students in different sections should be at the same level," said Smy. "One section should not be brighter than another."

Smy's job as chairman is to take action if a larger difference exists.

"If the difference is greater than 0.8, the chairman will talk to the professors and to persuade them to change the marks, or to find a good reason to let them go as is," said Smy. This could mean that some marks could be raised or some could be lowered.

Smy also said his faculty sticks pretty close to the old suggested distribution curve given by the GFC, and he would love to get the U of A to adopt (a common) curve for all faculties.

Registrar Brian Silzer disagrees. "In some faculties, the object of evaluation is different," said Silzer. "It would be unlikely if every faculty could use the same marking system."

Silzer also doesn't believe Engineers have a tougher time in getting scholarships. "Scholarship candidates are outstanding in every faculty. The standard for top marks in every faculty is equally rigorous," he said.

Smy, however, says Engineering courses are "brutal", and that students are drilled with an incredible amount of information; they also take six courses per semester. Smy says the top GPA in Engineering is usually around 8.4. When competing against faculties that have many students getting GPA's above that, said Smy, of course Engineering students will lose out on scholarships. "We work to fill the 4 to 9 gap uniformly, and it's annoying that the rest of the university isn't doing it," said Smy.

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But can Engineers really lose out on scholarships because of this? "Not at the Graduate level," said Ron Chilibeck, Director of Student Awards. The percentage of awards given in each area of graduate study is based on full-time attendance. For example, last year 62 percent of full-time grad students were in Science and Engineering, so 62 percent of the Graduate Awards went to the top students in that area.

Undergrad awards use a different process, though. Some, like the Heritage Scholarship, go to the top 1% in each faculty. Some other awards are faculty assigned; a student must be in a certain faculty to qualify, and then the basis for the receipt of the awards is generally marks, said Chilibeck.

Other undergrad awards are open to students from several or all faculties, and this is where there is a possibility for Engineering students to be short-changed. "For the most, the awards are given out by GPA," said Chilibeck. "They also try to pick a person who hasn't won another major award." Therefore, if a student in Education is chosen over an Engineer, it could be because Education students have fewer awards available, or because the student's marks were higher. If it were the latter, the best students in a faculty with a top GPA of 8.4 would be competing with students who aren't the best in their faculty, but have higher averages than 8.4.

It is hard to blame anyone for this problem, or for the overall difference in GPA's of each faculty. Each teaches different material in a different way. It would be hard for all courses to be graded in the same way. If it was decided to adopt a mandatory distribution curve for every course, it would probably suit some students, and be unfair to others.

Ron Chilibeck says the present system is often thought of as one of the best and most uniform in the country. This opinion comes from National Granting Agencies who ahve to decide on awards to be given out across Canada. The U of A's grading system is much cleaner and more consistent "than some smaller institutions, where averages can vary from faculty to faculty, but also within a faculty from year to year," said Chilibeck.

Still, some are not satisfied with the U of A's grading system. Others defend it. No one will say it is perfect, and almost everyone would agree with Associate Registrar Bonnie Afanasiff, who said, "there is no perfect marking system."