

The Transcription of Grades: A Background Paper

The landscape of medicine is constantly changing with societal influences affecting the direction of the profession. Medical education must keep pace with this ever-changing vista and train physicians with the skills necessary to meet the needs of Canadians. To this end, the Faculty of Medicine at the University of Toronto is currently engaged in a high level review of the curriculum. One of the many aspects being examined is a change in the transcription of grades from Honours/Pass/Fail to Pass/Fail. (This specifically would be transcribed as “Credit”/“No Credit” using the terminology of the University of Toronto). The initial impetus for the change came from medical students frustrated with the current system of grade transcription. After focus groups and informal surveys showed broad-based support for the change, the Faculty began to consider more carefully the issue of grade transcription (1, 2). While the details of such a change will have to be discussed at, and ultimately approved by Faculty Council, the Faculty of Medicine is inviting students to participate in the conversation by casting their vote in an upcoming referendum. This background paper hopes to provide students with a distilled version the arguments for and against a change in transcription.* While each of these choices is inherently uncertain in terms of a desired outcome, I encourage you to discuss and debate the claims presented here with your peers. The alternative is to accept or reject this change in a knee jerk fashion, dismissing to the realm of chance or happenstance a very important aspect of your curriculum.

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*Over the past few years, the change in transcription has been described and debated in a number of forums: UTMJ articles “How Honours/Pass/Fail Grading is Failing Students” and “Toronto’s Honours/Pass/Fail Debate: The Minority Position” 2008, a review by the Faculty of Medicine (Honour/Pass/Fail Grading Policy TASK FORCE 2006) and student focus groups held in the spring of 2008 as part of the paper: “Guiding Principles for Medical Education: A Student Review of the UME Curriculum at the University of Toronto Faculty of Medicine.”

Q. What is Honours/Pass/Fail?

A. *Honours, Pass, Fail* (H/P/F) is the current three interval paradigm of grade transcription used at the University of Toronto, Faculty of Medicine, MD program. Standing in a course is based on a summation of evaluations within the course. When converted to percentages: Honours (80%), Pass (79-60%), Fail (<60%). The three interval system provides opportunity to stratify students based on academic achievement.

Q. What is Credit/No Credit?

A. Credit/No-Credit (C/NC) is a two interval grade transcription paradigm. It is synonymous with a Pass/Fail (P/F) system of grade transcription. The University of Toronto grading policy recommends that Credit/No Credit be assigned for courses in which only very broad evaluative distinctions in assessing the quality of student performance are judged appropriate. As medical education focuses more on a competency-based model of education, a two interval system is seen by many as the most appropriate way to acknowledge if a competency has been achieved (3). Briefly, competency-based models of education focus on what learners are able to do, i.e. their mastery of an objective, rather than what they are expected to learn about.

Q. What is transcription?

A. Transcription is a component of grading policy. Transcription is the recording of a student's final mark for each course on their Official Transcript, this is currently done as H, P or F. The purpose of the Official Transcript is to provide evaluation data about students for record purposes and future use. (e.g., in applications to post-graduate training programs (CaRMS)). It is important to note that this is separate from evaluation methodology, which is concerned with what material is being tested, what methods of evaluation are employed and how evaluations are graded.

Q. What is the proposed change?

A. The Faculty of Medicine at the University of Toronto is considering changing the way student's grades are transcribed from an H/P/F system, to C/NC for all four years. This will not affect the way students are tested or the material that will be evaluated. Students will still receive feedback on their test performance after tests and exams, as they had been. Examinations and assessments will continue to fulfill their purpose of certifying that students have successfully mastered education objectives, reached defined levels of competency and provide feedback for students and faculty.

Q. How will this process proceed at an institutional level?

A. The change in transcription has already been debated at a number of Faculty Undergraduate Medical Education committees including the Undergraduate Medical Education (UME) Curriculum Committee, the Preclerkship and Clerkship committees as well as the Examination and Student Assessment Committee (ESAC) and will be recommended to the Education Committee of Faculty Council for debate after the student referendum.

Q. What are the referendum questions?

1. Are you adequately informed to make a choice? Yes/No
2. Are you in favour of replacing the current form of grade transcription (Honours, Pass, Fail) with Credit/No credit for all four years of your medical education? Yes/No

Requirements for a valid referendum result:

Minimum class response rate: 80% for years I &II; 60% for year III &IV

"Voted Yes" threshold: minimum 50% of each class population; 75% of overall student body

"Well informed" ballots: If > 20% of any class do not feel adequately informed the referendum will be postponed

This is a non-binding referendum and is merely consultative.

Q. What would a Credit/No Credit system look like?

A. In a Credit/No-Credit system the course content and evaluations would remain the same; the only change would be the transcription of students’ final marks at the end of a course. The threshold for what defines achieving the required level of competency might be adjusted and will likely be higher than the current 60%. The Medical Student Performance Record (MSPR), or “Dean’s report”, will likely have to be adjusted for the new transcription system. A change in grading policy may require an alternative means of conveying student qualifications, i.e. an elaborated Dean’s letter, to complement the information provided to postgraduate program directors by the Transcript. This may include additional ways of recognizing student excellence.

Presented here are the arguments for and against a change to Credit /No Credit. Contentious issues are presented by both sides. I encourage you to scrutinize the primary literature to further examine the claims made below. One caveat, articles preceding the early 1990’s may not be as relevant as innovations like problem-based learning (PBL) were not widely used – both positions present some data predating the 1990’s.

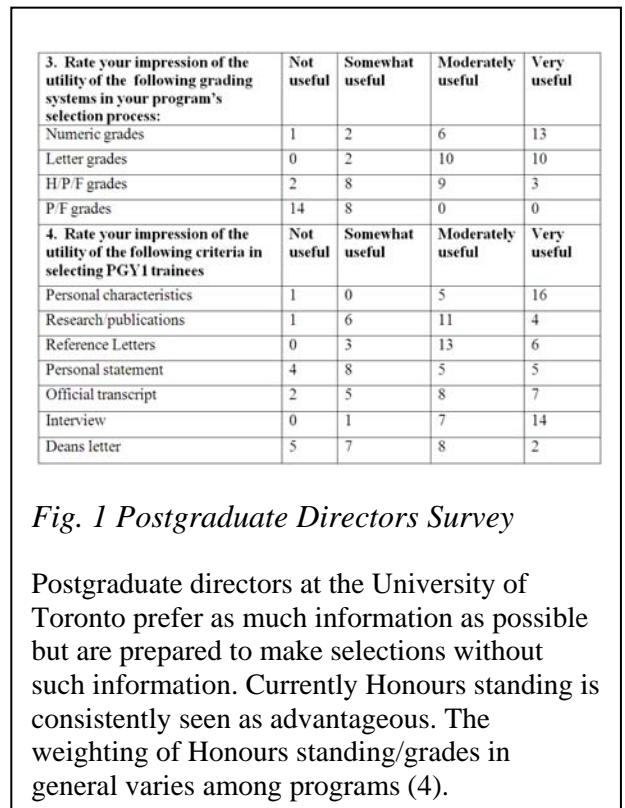
Arguments for Honours/Pass/Fail

Excellence is an overriding criterion of this University, and excellence should be incorporated in our educational programs. The University strives for excellence in students and in courses (4).

Consider Student A, who achieves a final mark of 79% in a course, and Student B, who has 80%. Though the difference between these two students might have been something as small as 2 or 3 questions correct on a test, the transcript will show Student A with a Pass and Student B with an Honours. While this result does illustrate one of the flaws of the H/P/F system, it is an intrinsic problem with categorical transcription of grades. No matter where the cut-off is made, there will always be people slightly above and slightly below it (5).

Does C/NC really reduce stress: The decreased stress and competition surrounding academic achievement is balanced by the increased stress and competition of finding alternate means of distinction, be it leadership positions, research productivity, or reference letters. Perhaps it can be argued that students will now be engaging in a more well-rounded pursuit of achievement, but the initial goal of reducing student stress and competition may not be attained (5).

As grade reporting progresses from a scale with multiple intervals to a scale that merely reports that a student has passed, information is lost and candidates appear more and more homogenous. A survey of directors of general surgery residency programs found that 81% believed that the evaluation system used by medical schools affects students’ abilities to obtain the residency position of their choice. Furthermore, the study also indicated that a P/F system is detrimental to applicants because it makes it harder to identify the students who performed best in the Pass category (5).



Jefferson Medical College Study: suggests that 1st year GPA was highly significantly associated with 2nd year GPA, 3rd year clinical exam grades, rating of clinical competence in core clerkship courses in 3rd year, and medical school rank (5).

The impact of instituting a P/F system will be different for each type of student. However, overall, it has been reported that students perform worse on examinations where a P/F system is used. While there are numerous studies relating medical school performance to other measures like USMLE Step 1, 2, and 3, undergraduate GPA, MCAT, and interview scores, there are not many studies investigating medical school performance and postgraduate clinical competence. One study of surgical residents did show that those from a P/F school accounted for 82% of surgical residents ranking below the 15th percentile and none ranking above the 87th percentile (5).

Arguments for Credit/No Credit System

Subjective nature of evaluations in clerkship: every clinical rotation of clerkship includes a portion of the grade allotted to ongoing clinical assessment, allowing preceptors to provide a subjective evaluation of the Clerk's performance. This component can account for between 10% - 60% of the student's final grade depending on the rotation. (6).

Preclerkship courses have an approximate 80% average and 6% standard deviation which means that over half the class lies within 5% of the Honours cutoff. In fact, assuming a normal distribution of marks, around 38% of students would fall within the range of 77-83%, either just above or below the cusp of Honours. The same situation exists in Clerkship courses as last year's overall third year and fourth year averages were 80.15% and 79.74% respectively (1). Some have argued that Honours has little meaning with much of the class achieving Honours and exaggerating the difference between those who receive Honours and those who do not.

3rd Year	Clinical Assessments	Written Exam	Oral Exam	OSCE/Clinical Skills Exam	Academic Projects
Medicine	50.0%	30.0%	20.0%		
Surgery	33.3%	33.3%	33.3%		
Obs/Gyn	33.3%	33.3%	33.3%		
Psych	40.0%	20.0%		25.0%	15.0%
Otolaryngology	20.0%	60.0%		20.0%	
Ophthalmology	10.0%	65.0%		25.0%	
Family Meds	45.0%			42.5%	12.5%
Paediatrics	50.0%	40.0%			10.0%
DOCH 3		50.0%			50.0%
4th Year					
Medicine	50.0%	30.0%		20.0%	
Surgery	33.3%	33.3%		33.3%	
Emergency	48.0%	48.0%			4.0%
Anaesthesia	40.0%	60.0%			
ACE	60.0%				40.0%
Dermatology	55.0%	45.0%			
DOCH 4		100.0%			

Fig. 2 Breakdown of evaluation by rotation

On average, the subjective ward evaluation comprises 40.3% of a student's third year grades or 46.2% of a student's fourth year grades (6).

The University of Michigan switched from a letter grade system to a pass/fail system in 1993. It was reported that the students in a Pass/Fail system were found to be significantly less stressed, less competitive, involved in more group work, and more cooperative. Most importantly (because that is the argument often raised), there was no evidence of 'just passing behaviour' and the test scores did not drop. When compared, the students in a Pass/Fail system showed an equally strong commitment to their medical education as those in a grading system (4).

Changing grading policy (how final marks are recorded on the transcript) would likely reduce anxiety over marks particularly in light of the University of Toronto policy of only transcribing final grades and not recording initial/preliminary grades (4). Research at other institutions suggests that changing to a Credit/No Credit grading system would have the benefit of encouraging collaboration among students and reducing stress with students performing no different on objective measures of scholastic performance (7).

A change in grade transcription would assist in standardizing grading across the province and nation, removing a potential disadvantage during the CARMS application process for the majority of students who will not achieve Honours in all courses, particularly for those without backgrounds in the relevant material (1). Currently, Western, McMaster, Northern, and Ottawa (Clerkship) are Credit/No Credit Schools. Toronto and Ottawa (Preclerkship) are Honours/Pass/Fail Schools. Queen's is debating a change to Credit/No Credit.

A close examination of the Jefferson Medical College study suggests the top 10% performed statistically better than all other groups while the bottom 10% performed significantly worse. A statistical difference was also observed between 60-70th percentile, while no statistical difference was observed between any other deciles. Apart from the one significant decile difference observed in the Jefferson study, it would seem to indicate that there is no statistical difference in future ability for those who do not fall into the top or bottom categories (1).

The move to a competency-based curriculum (e.g. CanMEDS) in undergraduate medical education is not conceptually supported by maintaining an interval transcription methodology (3).

References:

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5. [Guo R. and Muir J. "Toronto's Honours/Pass/Fail Debate: The Minority Position." UTMJ 85.2 \(2008\)](#)
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