

Results of the 2006 Pre-Enrollment Content Skills Survey

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The Graduate Management Admission Council[®] conducted a survey to determine the academic skills expected of students prior to taking courses in their graduate management programs, as well as the methods used at various programs to ensure adequate preparation. This paper presents and analyzes the results.

Methodology

The Pre-Enrollment Content Skills Survey was developed to determine to what extent programs expect specific subject matter expertise prior to the beginning of classes and what preparation methods are made available to help ensure the requisite expertise. Given that graduate business programs accept students from a wide variety of backgrounds, some of the incoming class may have little experience in the core subject areas they are expected to study. To account for this potential inexperience, some programs provide introductions to the core subject areas through orientation programs or other direct instructional methods, while other programs provide materials for students to study on their own. The survey was expected to provide programs with information they could use to

compare the expectations of various programs and the frequency with which they use preparation methods, as well as provide information about the methods in use.

Survey development was conducted in several steps. Once the subject matter of the survey was determined, focus groups were conducted in February, 2006, to get a sense of which subjects and preparation methods to include on the survey. The survey instrument was piloted with a few respondents to ensure understanding of the questions and adequate coverage of relevant topics.

The survey was conducted from May 10, 2006, through June 7, 2006. A total of 1,248 school professionals who work in the academic administrative area of a school using the GMAT[®] exam were contacted. There were 241 respondents to the survey representing 198 different schools and 339 programs—a 19% response rate. Of these schools, 37 were located outside the U.S. The characteristics of the programs are shown in Table I. Because of the limited sample, it should be noted that findings of the survey may not be representative of the general population of MBA programs.

Table I: Sample Characteristics	
N	339
Number of students Median (Interquartile Range)	54 (31-100)
Number of applications Median (Interquartile Range)	121 (60-300)
Number of staff members assessing proficiency Median (Interquartile Range)	3 (2-4)

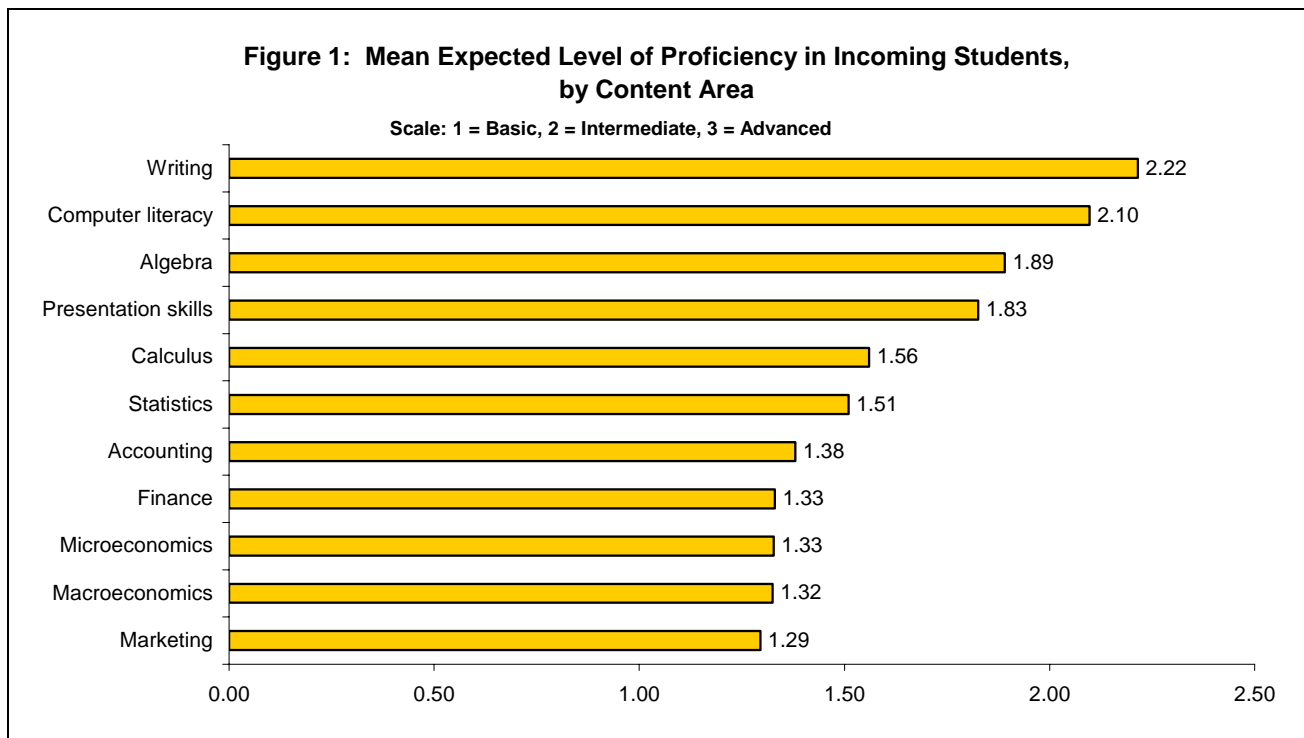
Table I: Sample Characteristics	
Educational Background of Students	
Business	42%
Engineering	20%
Humanities	10%
Sciences	10%
Social sciences	10%
Percentage of programs with cohorts	46%

Results

Proficiency Expectations

Respondents were asked to indicate the level of proficiency expected of their incoming students in eleven content areas on a three-point scale. Figure 1 shows the mean expected level of proficiency by content area.

Writing, computer literacy, algebra, and presentation skills were the content areas in which respondents expected the highest proficiency, followed by calculus and statistics. Specific business content areas—accounting, finance, microeconomics, macroeconomics, and marketing—were the content areas in which respondents expected the lowest proficiency.

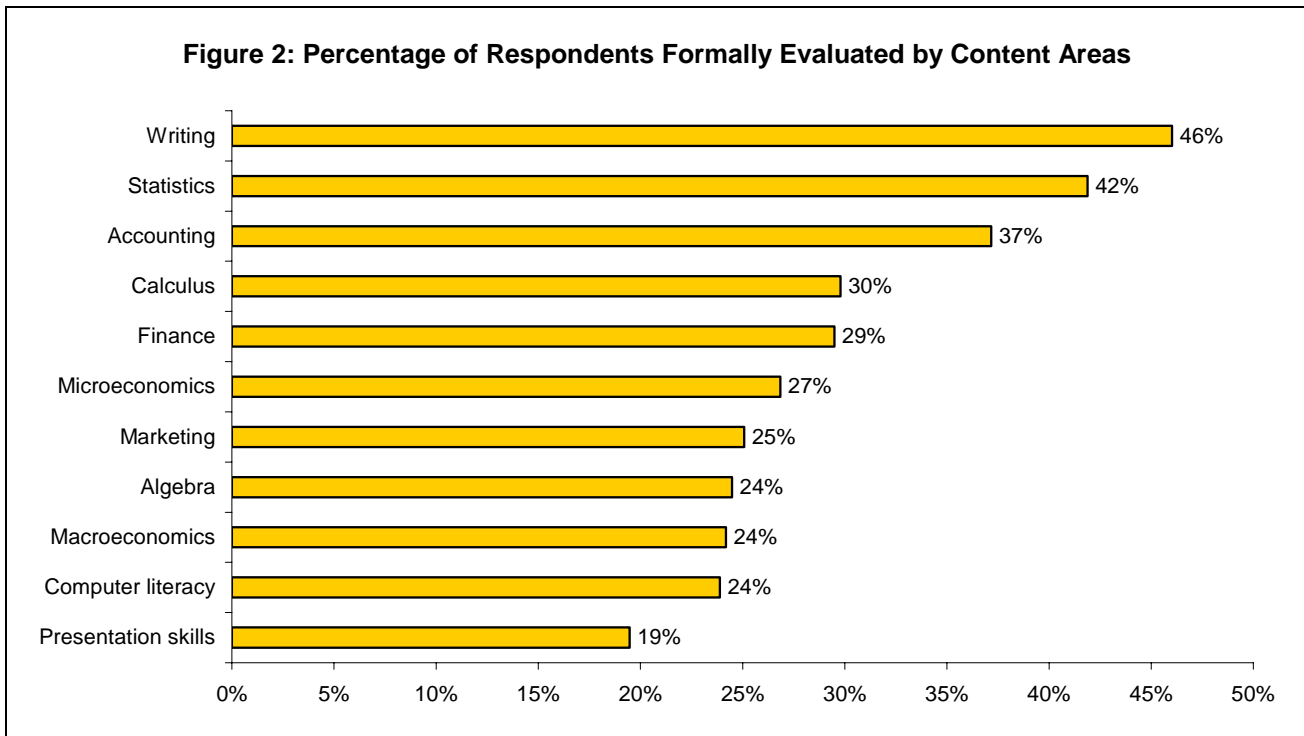


In addition to the eleven content areas listed for all participants, respondents were given the opportunity to list and rate additional content areas they could identify. Of the 22 respondents identifying background skills (e.g., English language skills; reading; reasoning; problem solving; mathematics; and computer, research, or study skills), 17 of the respondents expected intermediate or better proficiency in those areas. Other subject areas were mentioned 49 times, with only 25 responses expecting at least intermediate proficiency. These subject areas include management, business law, human resources, operations management, and organizational behavior. Two other categories of responses appeared: soft skills and work-related areas. Soft skills included communication, teamwork, leadership, and ethics, and in that area, at least intermediate proficiency was required for 12 of the 13 responses. There were four work-related responses that included interview skills and work experience, but none of

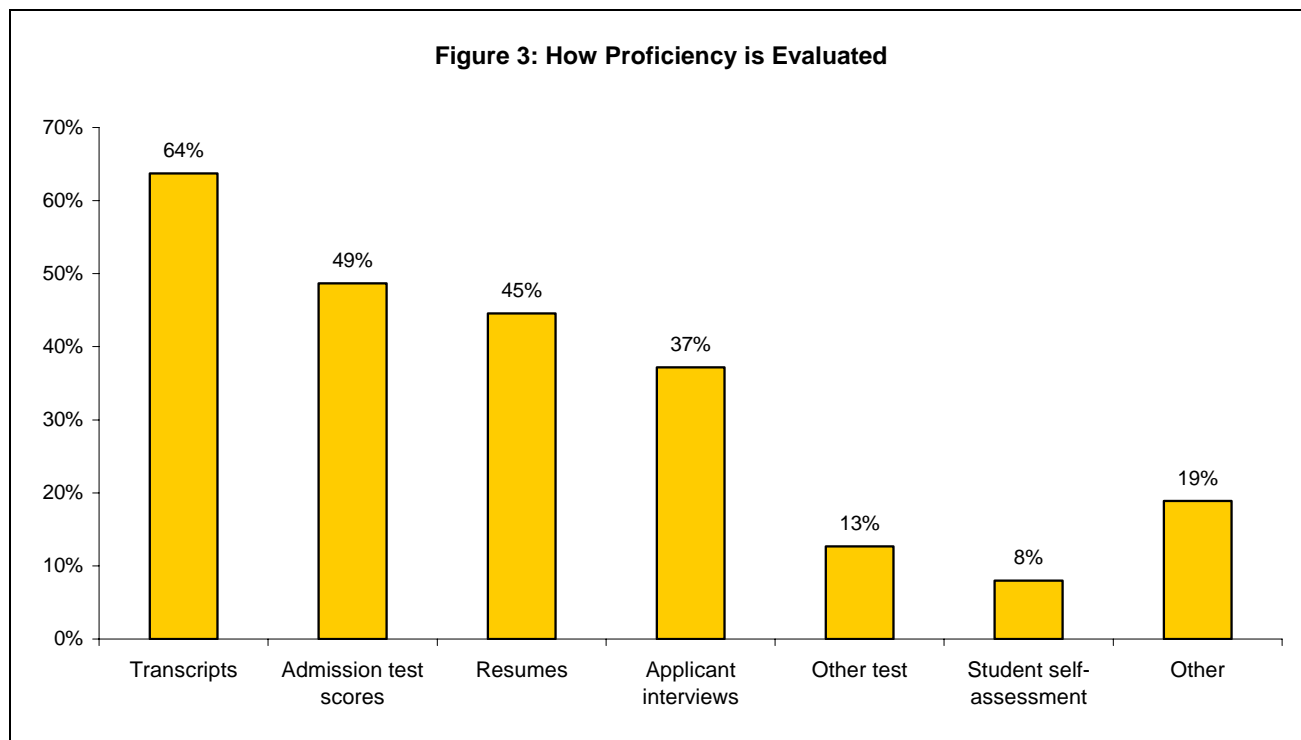
these responses expected greater than basic-level proficiency.

Proficiency Evaluation

Respondents were asked to indicate the content areas that are formally evaluated in their incoming students. Twenty-eight percent of the respondents reported no evaluation of proficiency was conducted. Of those who do evaluate proficiency, writing (46%) and statistics (42%) were the most-cited content areas formally evaluated, as shown in Figure 2. Although an expectation of basic-level proficiency in accounting was expected, it was the third-most evaluated content area. Additionally, although algebra, computer literacy, and presentation skills were content areas in which incoming students were expected to have higher levels of proficiency, these content areas were the least likely to be formally evaluated.



Based on the responses, the most common method used to evaluate prospective student proficiency among the participating schools is transcript evaluation, followed by admission test scores and resumés (Figure 3).



If a program indicated the use of “other tests” for assessment, they were asked to give more information about those tests. More than half of the 43 responses described tests developed internally, and many responses referred to admission tests such as the GMAT® exam or the TOEFL test. Only nine responses named professionally developed non-admission tests, and no one

test was mentioned more than twice. Other assessment method responses written include additional parts of the application process, such as statements of purpose or other essays and letters of recommendation.

Of all the assessment methods, respondents report that applicant interviews and resumés are the most effective, as shown in Table 2.

Table 2: Effectiveness of Assessment Method

Effectiveness	Applicant Interviews	Resumés	Admission Test Scores	Transcripts	Other Test	Student Self-Assessment	Other
	n = 126	n = 151	n = 165	n = 216	n = 43	n = 27	n = 64
Extremely effective	12%	10%	8%	11%	9%	7%	9%
Very effective	49%	50%	47%	47%	47%	52%	48%
Somewhat effective	39%	40%	44%	41%	44%	41%	42%
Not very effective	0%	0%	1%	2%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	100%

In general, respondents expressed low interest in using a new or additional pre-enrollment proficiency test. Writing, presentation skills, statistics, and computer literacy were the areas of highest interest in proficiency testing (Table 3).

Interest	Algebra	Accounting	Calculus	Computer Literacy	Finance	Marketing	Macro-Economics	Micro-Economics	Presentation Skills	Statistics	Writing
	n = 339	n = 339	n = 339	n = 339	n = 339	n = 339	n = 339	n = 339	n = 339	n = 339	n = 339
Extremely interested	10%	11%	9%	11%	9%	8%	7%	8%	13%	15%	18%
Very interested	12%	14%	9%	17%	11%	7%	9%	10%	19%	14%	24%
Somewhat interested	18%	32%	24%	32%	30%	27%	28%	29%	29%	33%	29%
Not very interested	19%	16%	24%	12%	17%	20%	20%	19%	12%	14%	8%
Not at all interested	42%	27%	33%	29%	32%	37%	36%	33%	26%	24%	22%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

According to respondents, admission staff (52%) and program managers (42%) were the most likely individuals to assess the incoming students' level of content proficiency (Table 4).

Admission staff	52%
Program managers	42%
Faculty	35%
Students self-assess	5%
Other	6%

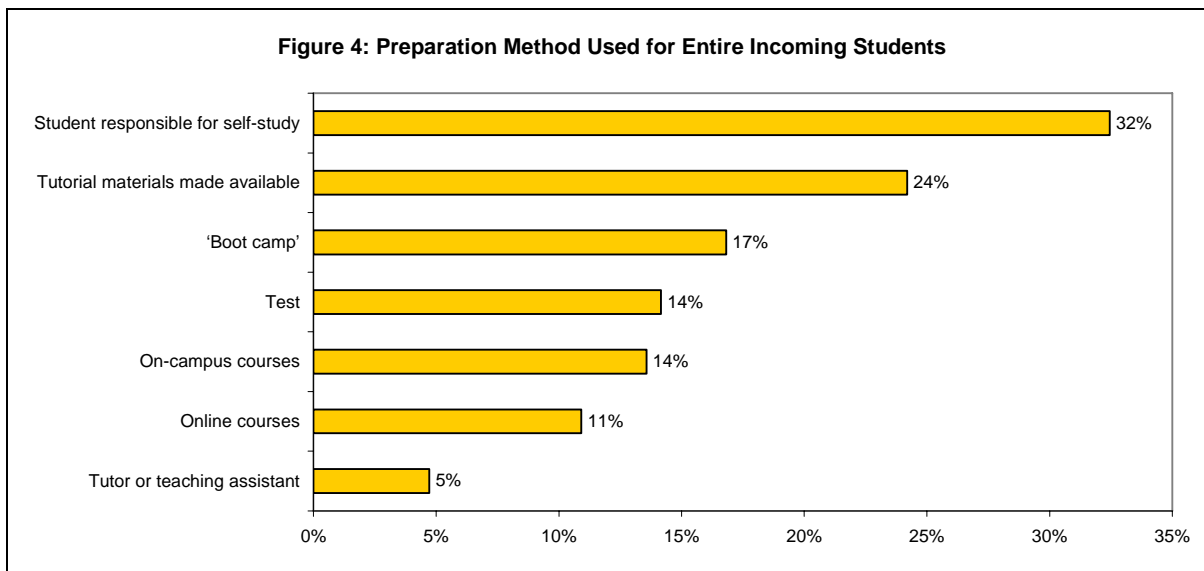
Assessment results were primarily used for conditional admission (47%) or to recommend or require additional preparation from the incoming student (43%) prior to their first semester in the MBA program (Table 5).

Conditional Admission	47%
Recommend or require additional preparation (i.e. boot camp, courses, etc)	43%
Course waivers	31%
Course placement	22%
Plan program curriculum	17%
Plan course curriculum	12%
Cohort assignment	10%
Other	5%

Preparation Methods

For the entire incoming class, student self-study (32%) is the most common method of program preparation

expected of students in the participating programs. The second-most common preparation method is the use of tutorial materials made available by the program (24%).



For those who used tests to assess the effectiveness of preparation methods, the tests were primarily designed internally (34 out of 65 responses). The GMAT® exam and the TOEFL test were also named by 19 programs as methods to assess preparation effectiveness. Of all tests described, eight were specifically described as accounting tests and six as quantitative skills tests. A few other subject

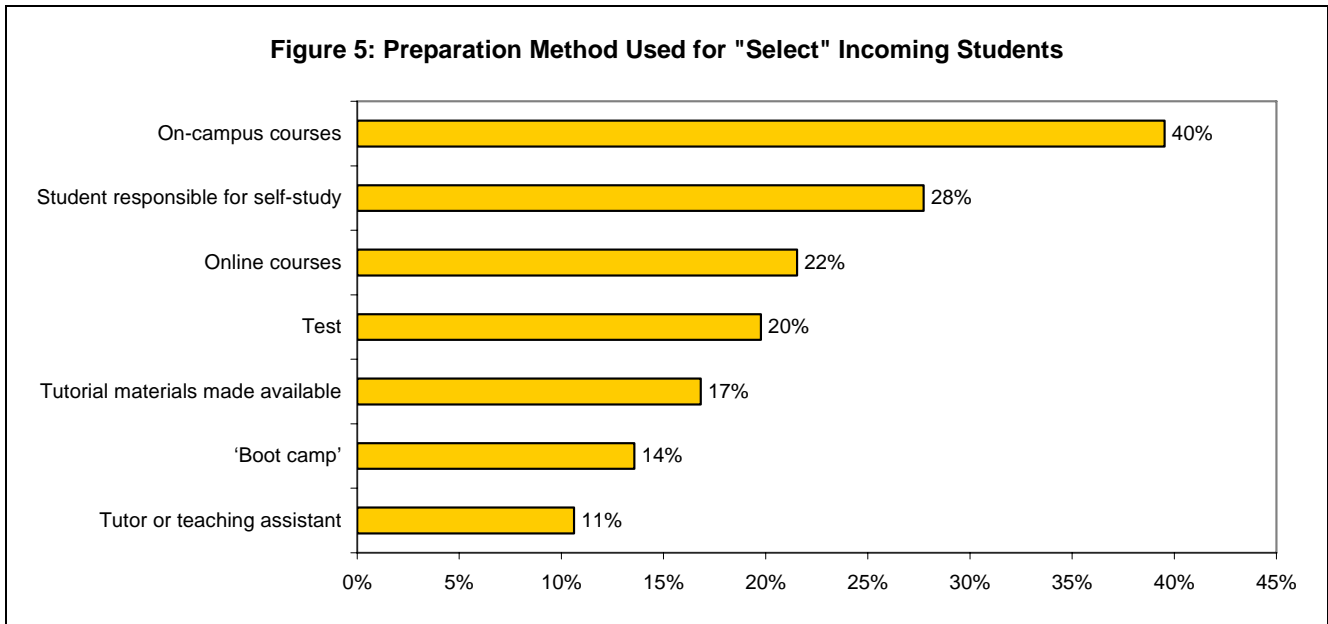
tests were described (e.g., microeconomics or language tests), though most responses simply indicated the test was an unnamed internal assessment.

When asked to indicate the effectiveness of preparation methods, boot camp and on-campus courses were ranked the highest, but these preparation methods were uncommon among respondents.

Table 6: Effectiveness of Preparation Method Used for Entire Incoming Class

Effectiveness	'Boot Camp'	On-Campus Courses	Tutor Or Teaching Assistant	Tutorial Materials Made Available	Student Responsible for Self-Study	Online Courses	Test
	n = 57	n = 46	n = 16	n = 82	n = 110	n = 37	n = 48
Extremely effective	9%	9%	6%	6%	4%	11%	10%
Very effective	47%	48%	44%	38%	41%	32%	40%
Somewhat effective	44%	39%	50%	54%	52%	54%	46%
Not very effective	0%	4%	0%	2%	2%	3%	4%
Not at all effective	0%	0%	0%	0%	2%	0%	0
Total	100%	100%	100%	100%	100%	100%	100%

The most common method of preparation used among participating schools for “select” incoming students was that of requiring on-campus courses (40%), followed by student self-study (28%).



The most effective preparation method used for “select” incoming students was a tutor or teaching assistant. However, the use of tutors or teaching assistants was the least-used preparation method.

Table 7: Effectiveness of Preparation Method Used for Select Incoming Class

Effectiveness	'Boot Camp'	On-Campus Courses	Tutor Or Teaching Assistant	Tutorial Materials Made Available	Student Responsible for Self-Study	Online Courses	Test
	n = 46	n = 134	n = 36	n = 57	n = 94	n = 73	n = 67
Extremely effective	9%	3%	0%	2%	5%	3%	6%
Very effective	43%	45%	64%	47%	37%	45%	52%
Somewhat effective	48%	48%	31%	47%	53%	49%	42%
Not very effective	0%	4%	6%	4%	4%	3%	0%
Not at all effective	0%	0%	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	100%

Discussion

Programs expect a variety of skills from students entering their programs. Not all of these skills can be assessed through the traditional admission measures, such as admission test scores and previous grade point average. Instead, other aspects of admission are used to assess proficiency in these areas. For instance, rather than

looking just at grade point average, admissions or other staff members can identify specific proficiencies in these areas by looking at individual courses on the transcript and grades for those courses. Interviews or required essays would give program staff further insight into some of the skills needed, but how the proficiency information is used differs by program.

Many of the programs recognized that even students who qualified to be admitted to the program might need extra preparation prior to taking the courses. The responsibility and cost for this preparation, for the most part, was handed down to the students, who were expected to undertake preparation on their own or take additional classes. (Orientation programs or 'boot camp' courses were not common.) As with the tests to assess proficiency, tests used to assess preparation effectiveness were often designed within each of the programs for their specific uses. Informal faculty feedback was often considered enough to ensure students were adequately prepared. Overall, programs felt preparation methods were effective.

Contact Information

For questions or comments regarding study findings, methodology or data, please contact the GMAC Research and Development department at research@gmac.com.

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