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Transition to College Courses:
General College Students'
Perceptions of the Relationships
between High School and College Courses

by

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Introduction

In the spring of 1995, 994 students enrolled in General College were asked to compare their GC courses to those taken in high school¹. The questionnaire was prompted by an earlier study of GC students who had transferred to upper division colleges, some of whom reported that their beginning college courses could have been more challenging and were similar to courses they took in high school (Wambach & Woods, 1995). The purpose of this study was to see if the perception that some college courses are similar to courses offered in high school was:

- present in students who have recently completed those courses,
- related to the content of the courses or methods used to teach them, or

- related to the high schools the students attended.

If the study revealed that the majority of GC students reported strong similarities between GC courses and high school courses, then the college would have to reconsider the appropriateness of the existing curriculum.

Method

A survey was designed to elicit students' perceptions of their courses. The survey asked students to compare how the GC courses they were currently enrolled in compared to high school courses and secondly, what their overall impressions of their GC courses were. Questions 1 through 6 asked students to compare the courses taken in GC to those taken in high school on issues such as:

- content of the course,
- methods used to teach the course,
- difficulty of homework and tests, and
- amount of time spent on projects and studying.

Questions 7 through 13 asked students about their overall impression of GC courses and how they compared to high school courses on the following issues:

- assessment of difficulty of GC courses,
- amount of time spent studying,
- amount of writing required in courses,
- amount of group work used in courses,
- amount of feedback received from instructors, and
- level of challenge experienced in GC courses.

All questions asked students to respond on a 5 point Likert scale.

Subjects for the study were students enrolled in GC courses spring quarter 1995. GC instructors were asked to distribute the surveys in their courses during the last week of the quarter as a part of a routine course evaluation. Responses were received from 994 students. Of the 994 responses, 794 were from GC students and 200 were from students enrolled in other colleges of the University. Only the responses of GC students were included in this analysis. The 794 responses by GC students do not represent unique individuals since some students were enrolled in more than one of the college's courses. A question on the survey asked students if they had responded to the survey in another course. 602 students responded yes, suggesting that 602 GC students are represented in this survey. The majority of the GC respondents (80%) indicated that they were first year students. Participation in the survey was affected by absenteeism from class and instructor willingness to participate. Thus the respondents represented a large, but not a random sample of GC students.

Data Analysis

The data analysis included:

1. a summary of student responses to each item of the survey,
2. a comparison of responses by course type (Chi Square and ANOVA), and
3. a comparison of responses by students' community of origin (Chi Square and ANOVA).

The course types used for this analysis were: mathematical thinking, composition, humanities, natural science, social science, speech and mathematical preparation. The communities of origin include: non-residents (states other than Minnesota), outstate Minnesota (Minnesota communities not in the Twin Cities Metropolitan area), Minneapolis, St. Paul, west suburban Minneapolis, south suburban Twin Cities, east suburban St. Paul, and north suburban Twin Cities.

Results

Perceptions of Course Content

[Question 1](#) asked students to indicate the extent to which the specific course they were completing was similar in content to high school courses in this subject area. Only students who had taken a similar course in high school responded to this item (n=510). Students varied considerably in their perceptions of the extent to which the content of their GC courses were similar to high school courses in the same content area. One third of the respondents indicated that the courses were very dissimilar, one third indicated that the courses were very similar and one third were intermediate in their response. There were significant differences in the patterns of responses across course [subject areas](#) ($p < .01$). Students were more likely to report similarities in content in mathematics preparation courses (51% very similar) than they were in composition, humanities or social science courses. Students also varied in their response to this item based on [community of origin](#). Tests of mean responses found that students from the southern suburbs rated content similarity significantly higher ($M = 3.24$) than did students from Minneapolis ($M = 2.63$) [$F(7, 477) = 2.02, p < .05$].

Perceptions of Teaching Methods

[Question 2](#) asked students to indicate how similar the teaching methods used in their current course were to teaching methods they experienced in this subject area in high school. Of the 515 GC respondents, 43% said the teaching methods were very dissimilar and 27% said they were very similar. There were no significant differences between [subject areas](#) or [community of origin](#) in their perceptions of teaching methods.

Perceptions of Course Difficulty

[Questions 3 through 6](#) asked students to rate various aspects of course difficulty compared to high school courses in the same subject area. Student's responses indicated that most students found their GC courses more difficult than high school courses: 52% said the [homework](#) was much harder, 54% said the [tests](#) were much harder, 65% said the [projects and papers](#) required more time and 60% said they [studied](#) more. Significant differences between [subject areas](#) were found for homework and projects. [Homework](#) in composition courses was rated as much harder significantly more often than was homework in any subject other than mathematical thinking [$F(6,483) = 3.9, p < .01$]. [Projects](#) in composition were rated as significantly more time consuming than projects in social science or humanities [$F(6,482) = 3.1, p < .01$].

Patterns of response to these items by [community of origin](#) found a significant difference on the [test difficulty](#) item [$F(7,457) = 2.2, p < .03$]. The data suggested that students from the western and eastern suburbs were more likely than other students to view their tests in GC courses as similar in difficulty to their tests in high school courses.

Overall Perceptions of GC Courses (Q 7 - 12)

[Items 7 - 12](#) asked students for general perceptions of GC courses. For this analysis, only surveys where students indicated they had not filled out the survey in another class were used (N=602). GC students were split in their assessment of the difficulty of [GC courses](#) compared to their high school courses. About half of the students (49%) rated their GC courses as more difficult than their high school courses and 40% rated the courses as equal in difficulty. Two thirds (67%) of GC students indicated that their college courses required more [study time](#) than high school courses, and 73% said their GC courses required more [writing](#). Students were more variable in their rating of group work and feedback. Half of the students (49%) reported that GC courses required much more [group work](#) while 34% indicated the same level as high school. Similarly, 49% reported that they received much more [feedback](#) on their performance while 37% reported that the level of feedback they received was similar. Overall, 60% of the students felt [challenged](#) in GC to do their best, 28% were neutral on this issue and 13% reported not feeling challenged.

Significant differences between students by [community of origin](#) were found on two items; overall [difficulty of courses](#) ($p < .01$) and [amount of group](#) work required ($p < .02$). Nearly twice the number of students from St. Paul, Minneapolis and non-residents found GC courses to be much harder (57% - 66%) compared to students from the west

suburbs and outstate Minnesota (30% - 37%). Students from the northern and western suburbs and from outstate Minnesota were more likely than other groups to rate the level of difficulty of GC courses as similar to high school courses (53% - 60% similar). An analysis of variance of the group means on this item found that students from St. Paul rated their GC courses as significantly more difficult ($M = 3.81$) than did students from the western suburbs ($M = 3.19$) and outstate Minnesota ($M = 3.30$) [$F(7,363) = 3.10, p < .01$].

Discussion

This survey, prompted by the findings of a 1994 study of GC students after transfer (Wambach & Woods, 1995), sought to discover the relationship between GC courses and high school curricula. The majority of students who responded perceived course work and requirements to be harder in GC than they were in high school. Except in mathematics, students saw the content of GC courses as different from high school courses in the same area. There were exceptions to this finding, however. Students in suburban schools were more likely to report similarities on content than were students from Minneapolis schools. This suggests that the content preparation that students bring to their classes may vary widely, challenging teachers to find ways to advance the learning of better prepared students while addressing the needs of students with less pre-existing knowledge in their subject area.

Students perceived that the methods of instruction they encountered in GC courses were different from those encountered in their high school courses in most areas of the curriculum. The exception to this finding was in mathematics, where students perceived strong similarities in teaching methods. Whether or not similarity in teaching methods is desirable or not is highly debated, however, the GC faculty have often espoused innovation in pedagogy and this seems less pervasive in mathematics than in other areas of the curriculum.

While students were divided in their perceptions of the uniqueness of their GC courses, they were in considerable agreement that they were working harder than they did in high school. They reported that the assignments and tests were harder, especially in composition classes. This perception of difficulty in composition courses may be related to the amount and type of writing assignments in these courses. While many parts of the curriculum have focused on more informal writing assignments, composition has required the kinds of themes and research papers that students expect in college. While the value of informal writing in beginning colleges courses is well established, it may be as valuable to effectively incorporate more traditional, formal writing into courses across disciplines.

Students whose high schools were located in Minneapolis, St. Paul and non-residents consistently rated GC course work as much harder and more dissimilar. Responses of students from the western, eastern, and southern suburbs of the Twin Cities were not as extreme. It may not be surprising that suburban high school students feel more prepared when they enter college. This may be due to environmental factors, and not merely the curriculum of suburban high schools. Students living in urban, inner-city neighborhoods face a variety of concerns that may create barriers to their successful education. Issues such as poverty, threats of violence, limited resources, and a lack of positive role models should be taken into consideration.

Students from non-residents regions may be challenged by other types of obstacles. These may include being away from home for the first time and adapting to Minnesota's climate. Many GC students who are not Minnesota residents are recruited athletes who experience pressure to compete successfully in their sport. Also, many of the non-residents students in this survey are from urban schools, similar to those in Minneapolis and St. Paul, and the preparation they received may be similar to that experienced by urban students in Minnesota.

[Appendix: Tables 1 - 32](#)