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AUTHOR Gottlieb, Esther E.; Yakir, Ruth  
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ABSTRACT

This study, a case study of Israel from a larger study of faculty perceptions around the world, examined faculty perceptions of determinants of teaching quality. The questionnaire asked about academic career patterns, work loads and allocation of time, attitudes toward teaching, methods of teaching and evaluation, research and publications, administration, job satisfaction, other social and educational issues, and demographic items. The questionnaire was sent to a sample of 2,225 senior faculty in Israeli institutions of higher education and 502 were returned. In general the findings indicated that respondents were satisfied with most of their working conditions (but not their salaries), with their teaching loads (average of 7.49 hours per week) and with their training for teaching and their teaching. In addition the study found definite differences between the teaching practice of college instructors and university professors. The two groups differed in their teaching practices, in the evaluation of students, in the number of courses they teach, and in the amount of time they think should be devoted to students. Personal preference toward teaching or research was found to have a significant effect on job satisfaction. College instructors more interested in teaching were also found to be more satisfied. (Contains 12 references.) (JB)

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ESTHER E. GOTTLIEB  
Seminar Hakibbutzim, Tel Aviv  
and  
West Virginia University,  
Morgantown WV 26505-6122

RUTH YAKIR  
Seminar Hakibbutzim College  
62507 Tel-Aviv, Israel

**FACULTY PERCEPTIONS OF ELEMENTS INFLUENCING THEIR  
TEACHING AND PROFESSIONAL DEVELOPMENT**

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Paper presented at the

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Esther E. Gottlieb

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This analysis used data collected for the Israeli case study part of the first international survey of the academic profession. The research focused on the work patterns, career progression, attitudes and values of the professoriate in higher learning institutions in fifteen countries. The study, which highlight the state of the academic profession in each country, includes a first-ever systematic analysis of faculty perceptions in several regions of the world, including the Pacific Rim, the Middle-East, Europe, South and North America (Altbach, forthcoming 1994).

The survey was initiated by the Carnegie Foundation for the Advancement of Teaching, the questionnaire (240 items) was developed by the research directors<sup>1</sup> of the participating countries from a draft used by the Carnegie Foundation in their U.S. studies of the academic profession. In addition to demographic data such as gender, age, degrees, specialization and academic preparation the questionnaire focused on: academic career patterns; work loads and allocation of time; attitudes toward teaching, methods of teaching and evaluation, research and publications, administration, job satisfaction, and a rang of social and educational issues.

The overall analysis of the Israeli case study has indicated several variables which seem to have relatively great explanatory power. One such variable was the faculty self-concept of orientation toward teaching and research. Other variables related to the core of academic life/work, such as, quality of training for teaching and research, teaching loads, teaching undergraduate or graduate students, job satisfaction, engagement in research, and

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<sup>1</sup>. The writers of this paper were part of the Israeli team.

research productivity, were also analyzed (see Chen, Gottlieb and Yakir, 1994 forthcoming).

Faculty development programs and teaching improvement efforts could benefit from faculty's evaluation of the academic profession in general, and in particular of variables affecting their own professional development such as teaching and research.

The intention of this paper is to describe faculty perceptions of determinants of teaching quality. An attempt is made to delineate factors which differentiate between faculty sub-groups, in order to understand the variety of faculty's make-up (gender, rank etc.) views on teaching in its institutional or disciplinary context. Before reporting on the present analysis we briefly review the higher education system in Israel.

### **The Local Context of Higher Education**

The double system in Israeli higher education is indicated by the formal distinction between the university sector and the non-university sector. The first two Israeli universities were inaugurated in 1924 and 1925. The Hebrew University of Jerusalem and the Technion (Israeli Institute of Technology) in Haifa followed the academic model of the German university, which integrated research and teaching. However, their organization and administration were influenced by the spirit of collective participation which prevailed in the Jewish community. Some of the institutions in the non-university sector were founded at the turn of the century as schools of professional training, granting professional certificates. Only in the last few decades have they been authorized to grant first academic degrees.

At present, the Israeli system of higher education consists of twenty-two institutions: six research universities, one research institute, an "open" (distance) university, six colleges

granting various professional degrees and eight teachers' colleges.

**The Student Body** - One of the main features of the Israeli system of higher education is the rapid growth of the student body. This is a consequence of the steadily growing number of high school graduates who pursue higher education. The size of an Israeli cohort is about 115,000 students. About 85% of cohort study in the twelfth grade and about one third successfully pass, the matriculation examinations. About 20% of a cohort are admitted to a university, and about 18% to another institute of higher education (Israel, Ministry of Education, 1992, table f, p. 5).

**The Faculty** - From the early sixties until 1983, the number of professors and lecturers grew at a faster rate than the student population. Since then, the total number of faculty has remained practically the same, in spite of the rapid growth of the student body, due to economic problems (Israeli universities are state supported up to 60% of their budget and State Colleges are entirely state funded). In 1991 the senior staff at all Israeli universities numbered 4,474 compared with 4,074 in 1979 (Israel, CBS, 1992, table 22.47). The relative decline in the size of the academic work-force has resulted in larger classes, fewer teaching and research assistants, and less time and resources for research. In contrast with the rapid growth and diversification of the student body, the academic staff has changed very little. The average age has risen. The percentage of women among the senior faculty of the academic departments of the universities grew from 11% in 1966 to 20% in 1988 (Shenhav, 1991). 10.5% of the faculty are of Asian-African origin and only 1.7% are non-Jews (Israel, CBS, 1984, table 20).

Most of the changes in the social composition of the senior faculty did not result

from a change in academic criteria for recruitment, which always required a Ph.D. and scientific publications, but from the diversity of new institutions and career paths.

The current deep crisis culminated in a strike of two month duration, from the end of January 1994 to end of March 1994, the longest strike ever. The academic faculty at all Israeli universities [but not the State colleges] struck over working conditions and salary. It should be noted that only teaching was disrupted; research activities continued as usual throughout the strike period.

Growth and diversification of the student clientele has been the most important transformation in Israeli higher education. This transformation has been coupled with an effort to address the ever growing social demand for higher education, without allowing the growth of the expansive university sector. Thus easing the pressure by "upgrading," or academizing, existing post-secondary schools and eight teachers education institutions, and permitting them to grant first academic and professional degrees. This development means that the colleges in Israel provide a different context of teaching/learning than the strong Humboldtian tradition of the research-oriented faculty in Israeli universities.

The transformation toward greater democratization of higher education implies larger class-sizes, higher teaching loads, and increased administrative and public-service responsibilities. In view of these changes it is worth pursuing an investigation of teaching quality determinants in order to delineate factors which differentiate between faculty's academic lifework in the two sub-groups, colleges vs. universities. Such research might contribute toward formulation of policies to improve practice by highlighting whether the transformation has, on the one hand, conflicted with the commitment and need to engage

in research and, on the other hand, whether it has produced faculty with a new profile deviate in their teaching/learning processes from university professors.

Teaching is the essence of academics' work since it is the nearest thing to a common activity that nearly all professors in higher education do. Yet research is what distinguishes professors within their own disciplines and plays a substantial role in forming hierarchies within institutions. The description of the actual working life of professors across disciplines and institutions, let alone across nations, is virtually unobtainable. "Complexity blocks direct comprehension in higher education as clearly as it does elsewhere in society" (Clark, B. 1987: 70). In the absence of data from direct observation, we must settle for polling professors for their perspective on their own teaching, working conditions, and job satisfaction.<sup>2</sup>

### **The Sample**

The sample attempts to represent the senior academic faculty in the six research universities as well as the academic faculty of fourteen non-research institutions (colleges). In 1991 there were 7,583 full-time teaching and research positions in the six universities. 4,474 of these posts (59.0%) were occupied by the senior academic staff, namely: lecturers, senior lecturers, associate professors and full professors. Excluding medical and law

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<sup>2</sup> Centra & Bonesteel, (1990) report on studies set up to evaluate the characteristics of 'good teaching'. Among others they report on the systematical analysis of the Syracuse group that used seven ways to collect data: self-assessment, classroom observation, structured interviews, instructional rating surveys, test or appraisals of students' achievements, content analysis of instructional materials, and review of classroom records. Although most of these method are applicable to studying small groups, some could be used for a national survey.

faculties (according to the research plan), the senior faculty numbered 3,937. There were 7,046 teaching positions in post-secondary education in 1990 (Israel, CBS, 1990). About 16.5% (1164) of them were occupied by academic faculty in colleges.

The questionnaire was sent to a sample of the senior faculty in institutions of higher education recognized by the Israeli Council for Higher Education (six universities, six professional colleges and eight teachers' colleges). Approximately one third of the total faculty population in Israel was randomly sampled, but stratified by institutional size. The questionnaire was sent to a total of 2225 faculty, and 502 completed questionnaires were received (22.56%). In general, the sample was found representative of the population on the three comparison variables of institutional size, academic rank, and departmental division. Almost half of the respondents (46.3%) work in the large universities; 29.2% report that they work in one of the smaller universities, and 24.5% work in 14 colleges. There is no proper explanation for the slight over-representation of the large universities and the colleges and the slight under-representation of the smaller universities in the response rate.

Females comprise approximately 20% of the senior faculty of universities (Shenhav, 1991). Their respective percentages among the university respondents are 20.6% in the sample of the large universities, 18.0% of the sample of the small universities and 44.5% of the colleges. They constitute 27.9% of the respondents. Once again the gender distribution of the respondents resembles the distribution of the population.

**Method-** Analysis of variance techniques were used to assess the effects of an independent variable -- type of institution (university vs. college) -- on perceptions influencing teaching quality, job satisfaction, student make-up, evaluations of student achievement, teaching



methods, class size, and faculty's declared preference toward teaching and research.

## RESULTS

### General Findings

In general the faculty in Israel, compared with the other research oriented systems in the international sample (such as Australia, Germany, The Netherlands, Japan, the U.K., and the U.S.). The Israeli respondents are satisfied with most of their working conditions (but not with salaries), with their teaching loads (an average of 7.49 hours per week), and with their training for research (84.7%) and for teaching (75%), which they rate as good or excellent. 80% of the sample agree that their institutions needs better techniques to evaluate teaching performance. 70% of the sample think that student opinions should be used to evaluate teaching effectiveness of faculty. College faculty believe that teaching effectiveness should be a prime criterion for promotion, while university faculty disagree with this measure for promotion ( $\chi^2=86.7$ ,  $p<0.0001$ , Cramer's  $V=0.43$ ).

The Carnegie surveys of the U.S. academic profession have shown that teaching load is a primary mechanism whereby an extreme differentiation of higher education is encouraged and effected (Fulton & Trow 1975). Beyond any doubt, the surveys have shown that research and scholarly work increase significantly as the institutional contexts shift away from community colleges, private colleges and liberal arts or comprehensive colleges toward research universities. Within major universities, teaching loads and research time vary markedly across disciplinary lines, based on the level of resources for research as well as on the relative emphasis placed on research by different fields. Where the value placed on new

knowledge is greatest (as in fields such as nuclear physics or biology), there the "release time" from teaching is also greatest (Carnegie Foundation 1989).

In the 1987 U.S. faculty survey, only those in lower liberal arts colleges and community colleges diverged from the rest of the professoriate in having little interest in research when asked, "Is your primary interest in teaching or research?" (Q.40). Even in those non-university settings, a third or so of the faculty claimed to have *some* interest in research. The same goes with the international survey. Faculty in all 15 surveyed countries indicated interest in research: Combining the two categories "interested mainly in research" and "leaning toward research" the results rang from as high as 75.2% for the Netherlands sample, followed closely by Japan (72.5%), Sweden (67.0%), Germany (65.7%), and Israel (61.6%). The U.K. with 64.0% and the U.S. with 50.8%, the lowest faculty interested in research, in the present sample were Chile (33.3%) and Russia (32.1%).<sup>3</sup>

Although 97% of the Israeli sample declared that they are currently engaged in at least one research project, and only 4.4% of them indicated that their research commitments had strong negative influence on their teaching, their interests in teaching or research differ significantly depending on their institutional affiliation. While college faculty's interests are primarily in teaching or lean toward teaching (69.5%),<sup>4</sup> university faculty's interests are primarily in research or lean toward research (72.9%). We found this difference worth pursuing in identifying other faculty perceptions of factors influencing teaching quality, and

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<sup>3</sup> Source of data: The Carnegie Foundation's International Survey of the Professoriate in Fourteen Nations, 1993/4, Tables.

<sup>4</sup>. R. Menges in Theall & Franklin (1991:24) discusses a similar finding from the 1989 U.S. faculty survey.

their association with institutional type and departmental affiliation.

### **Undergraduate Teaching Colleges vs. Universities**

There is evidence that different undergraduate teaching styles are represented in the colleges as compared with the universities. The first clue of these differences are presented by patterns of job satisfaction of the faculty. Table 1 records means of both faculty groups on the Job Satisfaction Scale. Lower scores on the scale represent greater satisfaction.

#### **Table 1. about here**

The first important point to notice is that there is no difference in the total mean scores of the two groups. However, analysis of the effects of gender, rank, department, research /teaching preferences, and institutional commitment on the job satisfaction scores of each of the groups reveal different patterns.

Males and professors in universities have higher scores on the job satisfaction scale. In the college sample, gender and rank are not significant sources of variance in job satisfaction. Departmental affiliation, hard vs. soft sciences, is not a significant source of variance in either population segment.

College faculty who work full-time in one institution are the most satisfied of all the sub-groups. For university faculty, institutional commitment is not a significant source of variance.

Preference for research or teaching has a significant effect on the job satisfaction of the faculty both in the colleges and the universities. College faculty who prefer teaching are more satisfied than those who prefer research. In the universities, the opposite is the case.

Those who prefer research enjoy more satisfaction in their job. While those who prefer teaching are in the minority in the universities and those who prefer research are in the minority in the colleges, there are not insignificant minorities in either case. Attempts to improve the working conditions of both groups of faculties should take these facts under consideration. For the benefit of higher education in Israel as a whole, it would seem important to provide suitable research opportunities for college faculty who seek such opportunities and reward segments of the university faculty for teaching productivity to a greater extent than is presently done.

College faculty spend more time in the classroom in contact with students, though not more time in advising individual students. On the average they also teach more courses.

**Table 2. about here**

Three attitude items are presented in Table 2 represent faculty attitudes toward students. The statement "Faculty should devote more time to students" was scored on a five-point scale with 1 representing complete agreement and 5 representing complete disagreement. College faculty agree to a greater extent with this statement than university faculty. University faculty feel their students "make as little effort as possible" and are prone to "cheat in order to get better grades" to a greater extent than college faculty. College faculty also agree to a greater extent than university faculty that teaching should be a criterion for promotion (see Table 2).

Mean class size of introductory undergraduate courses in colleges was significantly smaller than mean class size of this type of course in universities, but faculty declared that class size doesn't influence the quality of their teaching.

Yet quality of teaching is reflected also by methods of presenting course material to students and ways to evaluate student performance. In both of these activities, there are significant differences in the reported behavior of college and university faculty. ~~University~~ teachers lecture much more than college teachers, especially in introductory courses (see Table 3).

**Table 3. about here**

There is no significant difference in the time devoted to class discussion in the two institutional frameworks. However, colleges devote significantly more time to 'other' teaching activities. It is important to remember in this context, that most of the colleges in Israel are actually professional training schools. As such they probably devote a good deal of teaching time to supervise internship and practicum, all of which are probably included under 'other' teaching activities.

**Tables 4 and 5 about here**

From Tables 4 and 5, we note that there are also significant differences in the evaluation styles. It is important to see that the differences are sharp; we are dealing with differences in emphasis. First of all, college teachers 'evaluate' students much more than university teachers. All the significant differences in all types of evaluation activities demonstrate this direction. The differences are especially marked in the following required tasks for both introductory and other undergraduate courses: participation in class discussion, regular classroom attendance, and writing one long paper.

In conclusion, this preliminary analysis outlines some definite differences between the teaching practice of college instructors and university professors in Israel. The two faculties

differ in their teaching practices, in the evaluation of students, in the number of courses they teach, and in the amount of time they think should be devoted to students. Personal preference toward teaching/research has significant effect on job satisfaction; therefore College instructors who are more interested in teaching -- and this is the major component of their work -- are more satisfied. Clark (1987) in his study of the U.S. academic profession has noted the sharp differences between research universities and four year colleges faculties, yet he envisioned these differences as opening a gulf between the "professional" academy at large universities and academic teachers at small liberal-arts colleges and community colleges, who feel "de-professionalized" (p. 216). Our finding does confirm that the two faculties have a different life/work outlook, but their job satisfaction does not depend only on what they do but also on what they prefer to do.

### **Implications**

The research tradition is still deeply imprinted in the Israeli academic profession. Yet our analysis has shown a new profile of a college professor of education. It looks as though the college context has diverged from the teaching/learning processes at research universities in order to accommodate the new student population strata, previously excluded from higher education. Research, as measured by the production of original work and its publication in international professional journals, continues to be the sole criterion for tenure, advancement, and reputation of faculty members in universities, although 57% of their time is devoted to activities other than research, namely teaching (37%), service and administration. Here lies a threat to academic faculty development and the chances to

improve the quality of teaching. Production of knowledge as the single evaluation yardstick at a time when the system of higher education is moving from an elite to a mass system is hardly compatible with the growing teaching /learning needs of an ever-diversifying student body.

The question is, will the academic profession accept the challenge posed by this transformation? Will researchers/teachers assume a leadership role in shaping the inevitable changes and take responsibility for improving teaching and educational developments associated with democratization, or will they dig in to defend old trenches, leaving the field open to other contenders, namely college professors? These alternatives may represent two very different scenarios for the future of higher education in Israel (see Chen, 1993).

The main body of this research focuses on Israeli faculty perspectives. Nevertheless the purpose of this research is to allow the drawing of meaningful inferences, so that other case studies might profit from the precedent of the Israeli case. Case studies of particular countries (even somewhat anomalous countries) are crucial for anyone engaged in faculty development projects, instructional quality planning and policy formation to improve undergraduate learning. This is because the basic questions regarding the nature and consequences of teaching and educational development are less accessible to scrutiny through macro-educational analysis than they are in specific local or regional contexts.

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Table 1: Means of Job Satisfaction Scale of College and University Faculties by Gender, Rank, Department, Research/Teaching Preference and Institutional Commitment

Independent Variable	Colleges				Universities			
	N	Mean	SD	p<	N	Mean	SD	p<
Gender								
Female	54	2.4	.7	N.S.	69	2.6	.7	.01
Male	62	2.5	.8		292	2.4	.6	
Rank								
Professor	17	2.5	.9	N.S.	209	2.2	.5	.0001
Lecturer/Senior	97	2.4	.7		151	2.7	.7	
Department								
Hard Science	26	2.6	.7	N.S.	165	2.4	.6	N.S.
Soft Science	89	2.4	.8		195	2.6	.7	
Research/Teaching								
Research	35	2.7	.7	.03	257	2.4	.6	.01
Teaching	80	2.3	.8		96	2.6	.7	
Commitment								
Fully Committed	44	2.2	.8	.01	215	2.4	.6	N.S.
Others	73	2.6	.7		149	2.5	.7	
Total	N.S.	117	2.4	.8	364	2.4	.7	

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Table 2: Time Spent in Teaching Classes, Number of Courses, and Attitudes Toward Students of Faculty in Colleges and Universities in Israel

Variable	Colleges			Universities			p<
	N	Mean	SD	N	Mean	SD	
Hours teaching groups in class	112	8.63	3.4	349	6.66	2.8	.000
Number of courses	110	4.5	2.4	346	3.3	1.4	.000
Faculty should devote more time to students	104	2.3	1.5	324	2.9	1.4	.002
Students make as little effort as possible	112	3.0	1.4	332	2.6	1.2	.03
Students will cheat to get good grades	107	3.7	1.2	309	3.3	1.3	.01
Teaching should be a criterion for promotion	114	2.1	1.1	353	3.4	1.4	.000

Table 3: Use of Undergraduate Class Time by Methods of Teaching in Colleges and Universities

Percent of Time Devoted to:

Variable	Lectures	Discussion	Other	Total
University	73.3	25.0	1.7	100
College	59.8	29.1	11.1	100
Total	67.8	25.7	6.5	100

Table 4: Percentages of University and College Faculties Requiring Selected Tasks of Students in Introductory Courses

Task	University	College	p
Regular participation	32.1	50.4	.001
Writing short papers	26.0	37.6	.03
Writing one long paper	4.9	13.7	.001
Formal oral presentation	2.5	7.7	.04
Participate in discussion	15.1	33.3	.000
One examination	37.5	34.2	N.S.
Two or more examinations	19.5	13.7	N.S.
No specific requirements	1.9	0.9	N.S.

Table 5: Percentages of University and College Faculties Requiring Selected Tasks of Students in Other Undergraduate Courses

Task	University	College	p
Regular participation	41.4	65.0	.000
Writing short papers	31.5	43.6	.02
Writing one long paper	21.9	42.7	.000
Formal oral presentation	18.4	30.8	.01
Participate in discussion	34.0	53.0	.001
One examination	43.0	35.9	N.S.
Two or more examinations	12.3	12.0	N.S.
No specific requirements	2.2	0.9	N.S.

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