DOCUMENT RESUME

ED 397 729 HE 029 329

AUTHOR Negron-Morales, Patricia; And Others

TITLE Good Practices in Undergraduate Education from the

Students' and Faculty's View: Consensus or Disagreement. AIR 1996 Annual Forum Paper.

PUB DATE 7 May 96

NOTE 23p.; Paper presented at the Annual Forum of the

Association for Institutional Research (36th,

Albuquerque, NM, May 5-8, 1996).

PUB TYPE Reports - Research/Technical (143) --

Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS College Faculty; *College Instruction; College

Students; Comparative Analysis; *Educational

Practices; Expectation; Higher Education;

Institutional Research; Schools of Education; Sex Differences; *Student Attitudes; Student Evaluation of Teacher Performance; *Teacher Attitudes; *Teacher

Expectations of Students; Teacher Student

Relationship; Teaching Experience; Undergraduate

Study

IDENTIFIERS *AIR Forum; *University of Puerto Rico

ABSTRACT

This study examined teaching practices in undergraduate education by surveying 180 undergraduate students and 29 faculty, most in the school of education, at the Rio Piedras Campus of the University of Puerto Rico. Factors investigated include: (1) degree of agreement between faculty and students on good teaching practices; (2) relationship between faculty gender, rank, years of teaching experience, and overall rating of teaching practices; (3) relationship between students' gender, major, first college chaice, study level, academic expectations, career expectations, and overall rating of teaching practices; and (4) faculty expectation about students' performance in comparison with students' expectations. Significant differences were found in faculty and student perceptions about instructional practices. The practices students saw as frequently-used involved rigorous control and regulation, and those less-used included providing acknowledgment, support, and prompt feedback. Practices that faculty rated as frequently used were consistently those rated by students as least-used. Expectations of students most mentioned by students were those least mentioned by faculty. Implications for practice are discussed. (Contains 17 references.) (MSE)



Reproductions supplied by EDRS are the best that can be made

GOOD PRACTICES IN UNDERGRADUATE EDUCATION FROM THE STUDENTS' AND FACULTY'S VIEW: CONSENSUS OR DISAGREEMENT

Dr. Priscilla Negrón-Morales

Coordinator of Institutional Research Unit University of Puerto Rico Rio Piedras Campus

Prof. Isabel Vázquez-Rodríguez

Associate Researcher Center for Educational Research University of Puerto Rico Rio Piedras Campus

Ms. Annette De León-Lozada

Research Assistant Institutional Research Unit University of Puerto Rico Rio Piedras Campus

Paper presented at the 36th Annual AIR Forum of the Association of Institutional Research Albuquerque, New Mexico May 7, 1996

BEST COPY AVAILABLE

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY AIR

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improveme EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization ti protenting it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

INFORMATION CENTER (ERIC)

TO THE EDUCATIONAL RESOURCES





This paper was presented at the Thirty-Sixth Annual Forum of the Association for Institutional Research held in Albuquerque, New Mexico, May 5-8, 1996. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo Editor AIR Forum Publications



GOOD PRACTICES IN UNDERGRADUATE EDUCATION FROM THE STUDENTS' AND FACULTYS' VIEW: CONSENSUS OR DISAGREEMENT

Abstract

This study examined teaching practices in undergraduate education. The following questions were addressed: 1) is there agreement between students and faculty regarding these practices; 2) is there relationship between faculty gender, academic rank, years of teaching experience, and the overall rating of the practices; 3) is there relationship between students' gender, major field of study, first college choice, level of classification, academic expectations, career expectations and the overall rating of the practices; and 4) what were faculty's expectations toward students' performance and how these compare with students' own expectations. In the most general sense, there were marked differences when comparing the overall rating of students and faculty. Faculty were most likely to rate practices as often or very often used, while students tended to rate these same practices as sometimes or rarely used. Results are discussed in terms of a College of Education at a large state institution.



GOOD FRACTICES IN UNDERGRADUATE EDUCATION FROM THE STUDENTS' AND FACULTY'S VIEW: CONSENSUS OR DISAGREEMENT

Introduction

The mission of the Rio Piedras Campus of the University of Puerto Rico (UPR-RP) focuses on the attainment of excellence in higher education. As most universities in the Nation, its main efforts are directed toward the assessment of this outcome. There is consensus that the teaching-learning process is a cornerstone in the attainment of this goal. The Self-Study Report, the academic-administrative agenda of the Campus Chancellor as well as the policies of the Board of Trustees have highlighted the importance of the teaching-learning process, specially those aspects that directly impact students, in terms of overall student satisfaction and retention. Recent research by Tinto (1994) has recognized the importance of the teaching-learning process by linking a large proportion of student attrition to student experience in the classrooms and laboratories. Rather than peripheral, Faculty are central to the achievement of successful retention programs, since their role in the teaching-learning process is essential to ensure an educational environment of excellence.

Furthermore, there's evidence that indicates that greater content learning and cognitive development occur in classrooms where students are engaged in and by the instructional and learning processes (Astin, 1993; Pascarella & Terenzini, 1991). Teachers and students are primarily responsible for improving the educational environment, but to do so they need help. Some researchers have focused the improvement of education, specially in practices that supports faculty and students relations in the classroom. Developing several principles to define what will be considered good practices to enhance the educational environment could be an excellent tool to accomplish this goal. Since the last decade, the National Center for Educational Statistics (NCES) has researched the feasibility of establishing indicators of good practice in undergraduate education. They founded that indicators based on student behaviors and active learning instructional processes gathered through students and faculty questionnaires would be promising for development as potential national indicators (NCES, 1994).



1

Chickering and Gamson (1987) presented Seven Principles of Good Practice in Undergraduate Education, anchored in decades of research about teaching, learning and the college experience. Although educational practices have been a prominent research issue in Puerto Rico for almost a decade, studies regarding the principles suggested by these authors were not found.

This research intended to determine to what extent were faculty members of the College of Education actively using the seven principles presented in the Faculty Inventory, as developed by Chickering and Gamson. It also considered to what extent the faculty members were inducing, or using strategies that are considered indicators of good educational practices. It compared the faculty members evaluation with the students' opinions regarding these same practices. The findings of this research will be used by faculty members interested in improving their own teaching practices; as a basis for teaching improvement, discussion in department meetings and curriculum committee meetings; and will serve to promote professional development activities for both faculty members and administrators.

This study examined teaching practices in undergraduate education. The following questions were addressed: (1) is there agreement between students and faculty regarding these practices?; (2) is there significant relationship between faculty gender, rank, years of experience teaching and the overall rating of the practices?; (3) is there significant relationship between students gender, major field of study, first college choice, level of classification, academic expectations, career expectations and the overall rating of the practices?; and (4) which were faculty's expectations toward students' performance, and how these compare with students' own expectations.

Limitations

This study is limited in several respects. First, it is based on data from a relatively small sample of students and faculty members at a single institution who are probably not representative of any national population. Although the study was expected to include only students from the College of Education, several students from other colleges answered the Inventory, due to their enrollment in the course sections included in the sample.



One instrument limitation that should be kept in mind when interpreting results is the transparency of purpose. This can be an advantage, in that findings from survey data should not ordinarily be surprising or disagreeable to the faculty members that completed the Inventory. An obvious disadvantage associated with this Inventory is its vulnerability to the response faking, in order to make a professor appear more effective or efficient.

Review of Literature

Although the vast majority of colleges and universities claim teaching as their primary mission, recent studies have expressed disappointment with American Higher Education. Over the past decade, a number of individuals and organizations have found undergraduates to be inadequately prepared and have pressed for substantive change in higher education. Consistently these reports have criticized the quality of post secondary instruction and have clamored for the improvement of teaching (Brinko, 1993).

Seven Principles for Good Practices in Undergraduate Education

Apathetic students, illiterate graduates, incompetent teaching, impersonal campuses, so rolls the drumfire of criticism of higher education. More than two years of reports have spelled out the problem. Certainly, teaching and learning approaches for the betterment of undergraduate education that do not consider the commitment and actions of students and faculty members have failed. Faculty members and students are the resources on whom the improvement of undergraduate education depends.

But how can students and faculty members improve undergraduato education? Many campuses around the country are asking this question. To provide the focus for the education improvement process, the Johnson Foundation has offered seven principles based on research on good teaching and learning in colleges and universities. Following is a brief description of the Seven Principles for Good Practice in Undergraduate Education:

Good Practice Encourages Student Faculty Contact: Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students intellectual commitment and encourages them to think about their own values and future plans.



- Good Practice Encourages Cooperation Among Students: Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions improves thinking and deepens understanding.
- Good Practice Encourages Active Learning: Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves.
- Good Practice Gives Prompt Feedback: Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. In classes, students need frequent opportunities to perform and receive suggestions for improvement. At various points during college, and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.
- Good Practice Emphasizes Time on Task: Time plus energy equals learning. Efficient time-management skills are critical for students and professionals alike. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty. How an institution defines time expectations for students, faculty, administrators, and other professional staff can establish the basis for high performance for all.
- Good Practice Communicates High Expectations: Expect more and you will get it. High expectations are important for everyone-for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self-fulfilling prophecy when teachers and institutions hold high expectations for themselves and make extra efforts.
- Good Practice Respects Diverse Talents and Ways of Learning: There are many roads to learning. People bring different talents and styles of learning to college. Brilliant students in the seminar room may be all thumbs in the lab or art studio. Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learning in ways that do not come so easily. (Hatfield, 1995)

What Students Like Most

The evidence openly indicates that greater content learning and cognitive development take place in classrooms where students are engaged in and by instructional and learning processes (Astin, 1993; Pascarella & Terenzini, 1991). Students' engagement can be influenced by a diversity of mechanisms, but probably more directly by the instructional methods adopted.



Students have remarkably clear and coherent ideas about what kinds of courses they appreciate and respect most. When asked for specifics, students of all sorts list three crucial features:

- 1. Immediate and detailed feedback on both written and oral work;
- 2. High demands and standards placed upon them, but with plentiful opportunities to revise and improve their work before it receives a grade, thereby learning from their mistakes in the process;
- 3. Frequent checkpoints such as quizzes, tests, brief papers or oral exams.

The key idea is that most students feel they learn best when they receive frequent evaluation, combined with the opportunity to revise their work and improve it over time (Light, 1990). Similarly, instruction stressing inductive learning based on concrete activities consistently appears to promote gains in abstract reasoning and cognitive complexity. Classroom activities that require student participation—questions and answer exchanges, topical discussions, assignments that call upon higher order thinking, problem-solving activities, in class presentations, and student involvement in decisions about course content and activities— seem to promote course involvement (Pascarella & Terenzini, 1991).

Other recommendations include the creation of learning communities around specific themes and increased use of instructional technologies and other mechanisms for bringing students and faculty into more frequent contact. It is also reasonable to expect that good teaching will generate academic involvement. Effective teachers have good rapport with their students, are accessible in and out the classroom and give students formal and informal feedback on their performance (Astin, 1993).

Faculty Evaluations

One of the most commonly used criteria for faculty evaluation is the student point of view of teaching effectiveness, which at the same time, has remained one of the most controversial. Some researchers accept student ratings as a reliable and valid approach to the evaluation of instruction, though not without challenges (Abrami, 1989; Angelo, 1993; Smith & Cranton, 1992).



Nevertheless, faculty members have often expressed reserve about the meaning and the validity of student responses regarding teaching effectiveness. They have argued that students criteria in evaluating teaching are different from theirs. Faculty consider their own standards as being more relevant or consistent with the long-run mission of higher education (Feldman, 1988). The most common criticism of student evaluations is that they are biased by variables unrelated to teaching effectiveness; but in fact, student evaluations differentiated more accurately between courses in which faculty indicated that their teaching was most effective and least effective, than did the faculty self-evaluation of their own teaching (Marsh, Overall, & Kessler, 1979).

In spite of faculty skepticism, extant evidence shows faculty members not to be much different from students in their views on good teaching, at least in terr is of the expressed importance the two groups place on various teaching components.

In order to be useful, the results of student ratings must be informed to faculty so that they can identify which areas to improve. Recent literature coincides in that feedback from student ratings has been found to be valid and reliable, but only marginally helpful in improving instruction when used alone. Researchers also indicate that feedback is more effective when information is gathered from oneself as well as from others. Because feedback from self is more valuable, better recalled and more credible than feedback from other sources, it is perceived as more positive when recipients are involved in the assessment (Brinko, 1993). That is why in this research, both faculty and student ratings were included.

Method

Design, Participants and Analysis:

This study used a comparative descriptive design with two different samples. An instrument was administered during the first semester of the academic year 1995-96 to a proportional stratified random sample of 180 undergraduate students, enrolled in courses in the College of Education, and to a sample selected from the teaching staff of this College. Criteria for choosing faculty members were their availability and interest in responding the



survey. Multiple approaches were used to stimulate their participation. The resulting sample size was 29 professors which represent 45% of the full time faculty members from the

Teaching Foundations and the Teaching and Learning Departments.

Instruments:

The instrument used to collect data was the Seven Principles for Good Practices in Undergraduate Education-Faculty Inventory, part of a project initiated in 1986 under the auspices of the American Association for Higher Education (AAHE), The Education Commission of the States, and the Johnson Foundation, Inc. It was developed by Arthur W. Chickering of George Mason University, Zelda F. Gamson of the University of Massachusetts at Boston and Lois M. Barsi of the American Association of State Colleges and Universities (AASCU), with support from the Lily Endowment, and prepared by Susan J. Poulsen of the Johnson Foundation.

This Inventory is aimed to help guide faculty in conducting self assessments of their own practices consistent with the seven principles for good practices (Chickering and Gamson, 1987). Items in the Inventory ask faculty members to rate the frequency with which they engage in specific instructional activities consistent with each of the seven principles, and includes items on both classroom techniques and behavior, and more general contact with students. The Faculty Inventory has seven sections, one for each principle. There were seventy teaching practices' items in total. The adapted version of the Inventory included several questions related to faculty background and expectations toward students.

The students answered an adapted Spanish version of the Faculty Inventory, rewritten in terms of a students' point of view. Additional questions related to students background and academic expectations were included.

The instruments were translated by the researchers and evaluated by a group of experts. Most of the suggestions addressed the issues of cultural differences. Reliability coefficients were computed for the Spanish versions of the instruments (See Table 1).



Table 1

Reliability Coefficients for the Faculty and Students Inventory

Sub-scales	Faculty inventory	Students Inventory	Overall Coefficients
Student-faculty contact	.81	.76	.81
Cooperation among students	.66	.85	.87
Active learning	.75	.89	.91
Prompt feedback	.61	.86	.89
Time on task	.77	.85	.87
High expectations	.79	.89	.91
Diverse talents and ways of learning	.85	.90	.93
Full scale	.94	.96	.98

Pro edures

The instruments were administered during the second (Spring) semester of the 1995-96 academic year. Faculty were surveyed on an individual basis. An initial contact was established with the department chairs to make the necessary arrangements for the administration of the survey to the faculty. In the case of the students, they were surveyed at class meetings.

Mark sense sheets were used for both groups in order to facilitate data processing. The SPSS Package for Microcomputers was used to conduct data analysis. Descriptive statistics and correlation coefficients were used to analyze the compiled information. In addition, Chi square and t- tests were computed for the comparative analysis.

The first step of the analysis was to determine frequency of faculty engagement in teaching practices suggested in the survey items. The instrument rating scale consisted of five options, ranging from very often (1) to never (5). This implies that the lesser the mean, more frequently the practice was used.



Results

Faculty Inventory

The Faculty Inventory was answered by 29 professors. More than three-fourths of them (75.8%) were female and almost 42% were tenured professors with more than ten years of teaching experience. When asked about their expectations toward student performance, approximately seven of each ten answered that students: a) develop positive attitudes toward the teaching career (79.3%); b) could master the required skills to perform as teachers (75.9%); c) could effectively perform in an educational setting (75.9%). The expectation "could apply what they have learned in diverse settings" was selected by 65.5% faculty members.

The whole faculty sample indicated that they make special efforts to be available to students of a culture or race different from their own. Over 90% pointed out that they used very often the following practices:

- ask students to tell each other about their interests and background (96.6%)
- distribute performance criteria to students so that each person's grade is independent of those achieved by others (96.6%)
- give students complete, real-life situations to analyze (96.6%)
- ask their students to explain difficult ideas to each other (93.1%)
- discourage snide remarks, sarcasm, kidding and other class behavior that may embarrass students (93.1%)
- review their courses (90.0%)

Three of these practices are indicators of the sub-scale that address encouraging cooperation among students. The practices that were ranked as rarely or never used were the following:

- give students a pretest at the beginning of each course (27.6%)
- try to help in the resolution whenever there is a conflict on campus involving students (24.1%)
- make students clear that full time study is a full time job that requires forty or more hours a week (20.6%)
- require students to make up lost work if they miss classes (20.6%)



Another interesting finding was that 13.8% of the respondents stated they never make clear to students the amount of time that is required to understand complex material. The most outstanding principles in terms of frequency were **communicating high expectations** and, **diverse talents and ways of learning**. Nevertheless, when each item was analyzed separately, it was noticed that the most used practices correspond to separate principles.

Correlation coefficients were calculated to demonstrate if there exists significant relationship between faculty gender, academic rank, years of teaching experience, and the rating of the practices according to the Inventory. It was found that the academic rank of the faculty has a positive and significant relation with the principles of **giving prompt feedback** ($\underline{r} = .4203$, $\underline{p} < .05$) and **communicating high expectations** ($\underline{r} = .4468$, $\underline{p} < .01$).

Students' Inventory

A sample of 180 students answered the adapted Spanish version of the Inventory. Most of them were female senior students that expected to pursue graduate studies. Almost 80% were enrolled at the College of Education, predominantly from the major in Secondary Education. About 37% of them chose the College of Education as their first choice when admitted to the Campus; 23.3% and 16.1% chose Natural Sciences and Business Administration, respectively. Regarding their academic expectations as teacher candidates, students chose in first place, "applying what they have learned to different settings" (63.9%). The second and third alternatives were "mastering the required skills to perform as a teacher" (58.9%) and "effectively performing in an educational setting" (52.2%). The last one was "developing positive attitudes toward teaching" (32.2%).

Regarding the practices most frequently used, as perceived by the students, was that faculty made special efforts to be available to students of a culture or race different from their own (86.1%). The next three practices in terms of frequency were that professors:

expect their students to complete their assignments promptly (82.2%)



- distribute performance criteria to students so that each person's grade is independent of those achieved by others (81.1%)
- explain their students the consequences of non-attendance (72.3%)

Other practices that were ranked as frequently used by more than 60% of the students were that faculty:

- give students concrete real-life situations to analyze (64.4%).
- explain students what will happen if they do not complete the work on time (64.4%)
- ask students to relate outside events or activities to the subject cover in their courses (64.0%).
- tell students that they expect them to work hard in their classes (63.9%).
- give quizzes and homework assignments (62.7%).
- make clear the expectations orally and in writing at the beginning of each course (61.7%)
- share past experiences, attitudes and values with students (60,6%).

The most mentioned principles were **high expectations** (with three items), and student-faculty contact, time on task, and active learning (with two items each).

The majority of the students' sample considered some practices as rarely or never used by the faculty of the College of Education. More than 70% of the surveyed students ranked the next three practices as rarely or never used by the faculty members:

- discuss the results of the final examination with the students at the end of the semester (82.2%)
- give students a pre-test at the beginning of each course (79.5%)
- meet with students who fall behind to discuss the study habits scheduled and other commitments (73.3%)



Almost 69% of the respondents considered that faculty rarely or never called or wrote a note to students who missed classes. Over 50% of the participants indicated that professors rarely or never:

- arrange students field trips, volunteer activities or internships related to the course (53.9%).
- give students written comments on their strengths and weaknesses on exams and papers (52.7%).
- ♦ carry out research projects with the students (51.7%)
- ♦ ask students to schedule conferences with them to discuss their progress (51.1%)
- require students to make up lost work when missing classes (51.7%)
- ♦ ask students to keep logs or records of their progress (51.1%)
- o encourage students to praise each other for their accomplishments (50.1%).

Special attention should be given to the fact that six of the eleven practices evaluated by students as rarely or never used by faculty relate to the **prompt feedback** principle. This is consistent with the mean obtained for this sub-scale (33.6) which was the highest score. It is important to remember that the highest score indicates the less used practices.

Correlation coefficients were also computed to demonstrate if there is a significant relationship between student gender, major field of study, first college choice, level of classification, academic expectations, expected career and their rating of the practices according to the Inventory. Nine significant coefficients were obtained. Students major field of study positively correlates with encouraging active learning ($\underline{r} = .1472$, $\underline{p} = .05$), giving prompt feedback ($\underline{r} = .1413$, $\underline{p} = .05$), communicating high expectations ($\underline{r} = .1619$, $\underline{p} < .05$), respecting diverse talents and ways of learning ($\underline{r} = .1685$, $\underline{p} = .05$), and with the full scale ($\underline{r} = .1664$, $\underline{p} = .05$). The level of classification positively correlates with emphasizing time on task ($\underline{r} = .1523$, $\underline{p} = .05$) and respecting diverse talents and ways of learning ($\underline{r} = .1897$, $\underline{p} < .01$). At last, the career expectations of students significantly correlates with encouraging cooperation ($\underline{r} = .1588$, $\underline{p} < .05$) and respecting diverse talents and ways of learning ($\underline{r} = .1561$, $\underline{p} < .05$).

BEST COPY AVAILABLE

Comparative Analysis:

A cross tabulation was performed to compare faculty expectations toward students with students' own expectations. There were differences in the rating of the expectations for the two groups. The expectation that was mentioned more often by the faculty members (79.3%) was the less selected by the students (32.2%) [$x^2 = 23.35$; 2df; p < .01]. This was that student's "develop positive attitudes toward the teaching career". Inversely, the most chosen by students was the least indicated by faculty, although the percentual differences were low. This was that students "could apply their acquired knowledge in different settings". Statistically significant coefficients were also found in the expectation that refers to "effective performance in a school setting". Faculty selection was higher than students' [$x^2 = 5.69$; 2df; p < .051].

In the most general sense, there were marked differences when comparing the overall rating of both groups. Faculty members were most likely to rate practices as often or very often used, while students tended to rate these same practices as sometimes or rarely used. However, student and faculty members coincided in the rating of the most and least frequently used practices. Both groups agreed that the efforts faculty members do to be available to students of a culture or race different from their own, was the most frequently-used practice. Both groups perceived giving pretests at the beginning of the courses as the least used practice. Several survey items showed interesting response patterns:

Student-Faculty Contact: Students and faculty agreed in their evaluation of the practices regarding campus conflicts involving students. Both groups considered that faculty participation in conflict resolution was not frequent and that only occasionally faculty members got involved. They also coincided in indicating that faculty often served as mentors or informal advisors to students. Advising students about career opportunities in their major field and students dropping by professors offices just to visit were the items that yielded the most noticeable differences between the two groups.

Encouraging Cooperation among Students: Great differences were registered in this principle between students and faculty. The only practice in which the evaluation was similar



principle between students and faculty. The only practice in which the evaluation was similar pertained to the distribution of performance criteria to students, so that each persons' grade was independent of those achieved by others. Both groups informed that this practice was frequently used. The most relevant differences between the responses of students and faculty occurred on practices related to encouraging students to join at least one campus organization and asking students to evaluate each others work.

Encouraging Active Learning: Lack of agreement was observed between faculty and students when referring to this principle. Differences of 1.0 or more were registered in the ten practices included. Because of the relatively narrow range of this rating scale, these differences were considered as important. The greatest difference was observed on the practice that addressed arranging field trips, volunteer activities, or internships related to the course.

Prompt Feedback: Both groups coincided in that giving quizzes and homeworks assignments was a practice often or very often used. However, great disagreement was observed when evaluating the practice concerning discussion of the final examination results. Faculty considered that they often discuss the results of the final examination with their students at the end of the semester, while students consider that they rarely or never do.

Time on Task: Similarities were found on the opinion of faculty and students with regard to the frequency in which professors expect students to complete their assignments promptly. Both groups rated this practice as the most frequently used. Considerable differences were found in their evaluations of the practices related to conducting meetings with students who fall behind.

High Expectations: On this principle, both groups were likely to rate practices as often or very often used, except the two practices related to courses revisions and periodical discussion about how was course going. As mentioned previously, faculty rated them as frequently used while students were opposed.



Diverse Talents and Ways of Learning: Noticeable discrepancies were observed in the rating of this principle. The most remarkable was that faculty considered that they very often selected readings and designed activities related to the background of their students. On the other hand, students evaluated this practice as sometimes or rarely used.

To look beyond this descriptive analysis t-tests were performed. Table 2 shows the t values.

Table 2

T values for the seven principles and for the full scale

Scales	Faculty Mean	Student Mean	T -Value *
Student-faculty contact	17.60	26.64	7.42
Cooperation	14.00	27.33	10.04
Active learning	14.46	27.77	8.83
Prompt feedback	17.11	33.60	11.13
Time on task	16.32	28.59	8.24
High expectations	12.39	24.36	8.12
Diverse talents and ways of learning	15.11	29.57	9.03
Full Scale	107.00	197.86	11.01

p < .001

As can be seen in Table 2, t-values indicated that the two groups did, indeed, differed at statistically significant levels ($\underline{p} < .001$) in their ratings of each of the seven principles as well as the overall rating.

Discussion and Implications

The present study was inspired in the Seven Principles of Good Practices in Undergraduate Education (Chickering & Gamson, 1987) and by higher education studies that address approaches that promotes student retention. The emphasis for this study was the comparison of the faculty and students' perceptions of the frequency in which faculty engage in the use of the previously mentioned practices. This approach was taken for several reasons. First of all, we consider that faculty and students' input are both relevant if we are really



interested in improving education. Second, because the perception of people who delivers the services usually differ from that of the recipient. A third consideration was that faculty members will be more disposed to make changes if they have participated in the assessment process.

In spite of the limitations, important findings have been obtained through this research. One of the most striking was that the practices that student rate as most frequently used imply rigorous control and regulations, which in our culture are seen as restraining behavior. On the other hand, the practices picked as less used relate to providing acknowledgement, support and prompt feedback. Literature about teaching and learning processes stress the prominence of the use of these practices for encouraging student involvement (Angelo, 1993; Astin, 1993; Light, 1990; Pascarella & Terenzini, 1990).

In regard to the frequency in which faculty get engaged in the use of the practices, great disagreement was observed between both groups ratings. Faculty members aligned their position in the most used category and students on the least used, which means contradictory positions. This pattern was consistent across the whole evaluation, regardless background variables, such as gender, rank, and level of classification. This disagreement could be attributed to the self-assessment nature of the Faculty Inventory, while for the students, it was a general evaluation of the faculty. However, these discrepancies should not be undervalued for different reasons. In Tinto's research on persistence, he points out that large differences between students perceptions and reality results in great dissatisfaction and discontentment, which in terms increase the probability of students withdrawing from the Institution (Tinto, 1987).

Disagreement was also found when faculty and students were asked about expectations toward students performance. An inverse pattern was observed in which the most mentioned expectation for students was the least for faculty. It is important for faculty to be aware of students' expectations in order to clarify them and to work toward its fulfillment.

The findings of this study have a broad array of implications for practice. The study suggests that more interaction is needed between faculty and students. High ranking of these practices by the faculty implies that they recognize the importance of these principles in the



teaching and learning process. Sharing these findings with faculty members, with a conciousness raising purpose, might provoke practice reflection so that they can modify some attitudes and behaviors regarding teaching and learning process. The discussion of the practices included in the inventories, as well as it results, could be a basis for the analysis of what is good teaching, what are the best strategies and what are the most effective approaches to encourage faculty contact with students.

Further research must be conducted regarding students' perceptions of the practices and the different meaning these practices have in various cultural settings. Finally, but not less important, is the contribution to the Hispanic population of a Spanish version of the Faculty Inventory and the adaptation of the instrument to a student perspective.



REFERENCES

- Abrami, P. C. (1989). SEEQing the truth about students ratings of instruction. <u>Educational</u> <u>Researcher</u>. jan-feb: 43-45.
- Angelo, T.A. & Cross, K. P. (1993). <u>Classroom Assessment Techniques: A Handbook for College Teachers</u>. San Francisco: Jossey-Bass.
- Astin, A.W. (1993). What Matters in College?: Four Years Revisited. S F: Jossey-Bass.
- Bausell, R. B., & Bausell, C. R. (1979). Students ratings and various instructional variables from a within-instructor perspective. *Research in Higher Education*. 11(2): 167-178.
- Brinko, K. (1993). The Practice of Giving Feedback to Improve Teaching: What is Effective? <u>Journal of Higher Education</u>. 64 (5): 574-593.
- Chickering, A.W. & Gamson, Z. F. (1987). Seven Principles for Good Practices in Undergraduate Education. *The Wingspread Journal*. 9 (2): Special Section.
- National Center for Education Statistics (1994). A preliminary study of the feasibility and utility for National Policy of Instructional 'Good Practice' indicators in undergraduate education. (NCES 94-437). U.S. Department of Education: Office of Educational Research and Improvement.
- Feldman, K. A. (1988). Effective college teaching from the students' and faculty's view: Matched or mismatched priorities?. Research in Higher Education. 28(4): 291-344.
- Hatfield, S.R. (1995). <u>The Seven Principles in Action: Improving Undergraduate Education</u>. Bolton, MA: Anker Publishing Company, Inc.
- Kaplan, E. J. & Kies, D.A. (1993). Together: Teaching Styles and Learning Styles Improving College Instruction. *College Student Journal*. 27: 509 513.
- Light, R.J. (1990). Harvard Assessment Seminars: Explorations with Students and Faculty about Teaching, Learning, and Student Life. First Report. Cambridge, MA: Harvard Graduate School of Education and Kennedy School of Government.
- Marsh, H. W., Overall, J. U., & Kessler, S. P. (1979). Validity of students evaluations of instructional effectiveness: A comparison of faculty self-evaluations and evaluations by their students. *Journal of Educational Psychology*. 71(2): 149-160.



- Pace, C. R. (1995). From good processes to good products; relating good practices in undergraduate education to student achievement. Paper presented at the AIR Forum: Boston, Massachusetts.
- Pascarella, E.T. & Terenzini, P.T. (1991). <u>How College Affects Students: Findings and Insights from Twenty Years of Research</u>. San Francisco: Jossey-Bass.
- Smith, R.A. & Cranton, P.A. (1992). Students' Perceptions of Teaching Skills and Overall Effectiveness across Instructional Settings. <u>Research in Higher Education</u>. 33 (6): 747-763.
- Tinto, V. (1987). <u>Leaving College: Rethinking the Causes and Cures of Student Attrition</u>. Chicago. The University of Chicago Press.
- Tinto, V. (1994). Moving Beyond Student Retention. Paper presented at the University of Puerto Rico, Rio Piedras Campus.

