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ABSTRACT

The impact of the Katz/Henry Faculty Development Model on teaching behaviors and student learning outcomes was assessed with 24 faculty members at 4 institutions in New Jersey. This model, known as "Partners in Learning" involved: faculty pairs who observe one another's class, partner meetings to discuss shared experience in the classroom, several interviews with at least three students, and meetings with other faculty participants on campus to discuss experiences. Data on learning outcomes, teaching behaviors, and collegial interactions were collected for three years at four diverse institutions in New Jersey. Students completed pre- and post-tests which examined their preference for class structure and teaching style, their interactions with faculty, student changes resulting from the course, and academic skill development. Faculty were evaluated at least three times per semester to document clarity, enthusiasm, interaction, organization, pacing, disclosure, and rapport. Syllabi were examined, and faculty attitudes about their classroom experiences were surveyed. While no discernible increase in student academic achievement was found, the data indicate enhanced faculty understanding of student learning, improved relationships with colleagues, and increased changes in classroom teaching. Appendices include: student pre- and post-tests, classroom observation protocols, a syllabus checklist, and a faculty survey. (SW)

HE

Project Title: Assessing the Teaching and Student Learning Outcomes of the Katz/Henry Faculty Development Model

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Executive Summary

Project Overview

The New Jersey Institute for Collegiate Teaching and Learning (NJICTL) assessed the impact of the Katz/Henry Faculty Development Model (known as "Partners in Learning" or PIL) on the teaching behaviors and student learning outcomes of 24 faculty members at four diverse institutions in New Jersey. Data on short term and long term learning outcomes, teaching behaviors, and collegial interactions were collected from a variety of sources over a three year period. The data showed that participation in PIL enhanced faculty's understanding of student learning, enhanced their relationships with colleagues, and caused them to make changes in their classroom teaching. Despite these critical self-reported changes, there were no discernible patterns of increased student academic achievement in the focal courses.

Purpose

This project afforded an opportunity to assess teaching behaviors from the students perspective, the individual faculty's perspective, and the collective faculty's perspective. It documented the ways in which faculty development efforts can alter classroom performance, and in some cases, permanently change the way faculty go about teaching their courses. It also provided a framework within which to assess the utility of a research study for documenting the links between faculty development and student learning.

Background and Origins

The model for the Partners in Learning (PIL) Program evolved during a decade-long collaboration between the late Joseph Katz and Mildred Henry. They developed a teaching enhancement program that focuses on student learning while engaging faculty in dialogue about the college classroom. Their work has been widely disseminated in the volume *Turning Professors Into Teachers.*

The structure of PIL is a simple one: faculty pair themselves off and periodically sit in on the other's class over the course of a semester or quarter. During the following term, the two switch roles with the observed now doing the observing. The partners meet

frequently to discuss their shared experience in the classroom. The partners also interview students several times over the course of the term, then meet with other faculty participants on campus to discuss their experiences

The outcomes of participation in PIL are often secondary to the process itself: it brings attention to the process of student learning, to what students are thinking, and to the experiences faculty share. The process rejuvenates instructors, channels the stresses that arise from teaching, and mitigates the sense of being isolated in the classroom. Through the partnerships, two professors get to share a class and examine together the dynamics of student learning in that class.

Project Description

Beginning in Academic Year 1992-93, twenty-four faculty at four diverse institutions began participation in the project. They were a diverse group: veteran teachers who had a strong background in faculty development and teaching enhancement initiatives; experienced teachers who had only recently become aware of faculty development; those new to college teaching; and others somewhat disinterested in teaching enhancement but willing to participate for released time or a stipend.

The faculty were coupled in interdisciplinary pairs. The faculty member who was teaching the course was the "observed," and the partner was the "observer." The partners alternated roles by semester, and each faculty pair participated in this routine for two of the three years. Each member of the pair interviewed at least three students three or four times during the semester, and kept journal entries to record their impressions.

The faculty's students were surveyed via a pre-test and post-test, examining students' preference for class structure and teaching style; interactions with faculty; experiences in the course (principally evaluating the teacher's behavior); intellectual, social, or personal change resulting from the course; teaching behaviors and their impact on learning; and progress made in enhancing academic skills in the course. There was an academic achievement question with each post-test, designed to reflect students' mastery of the subject matter. The students grade point average and scores on the New Jersey Basic Skills Placement Test were collected as well to control for student level.

The faculty were also observed by NJICTL staff at least three times per semester to document clarity, enthusiasm, interaction, organization, pacing, disclosure, and rapport. Syllabi from each faculty's focal course were collected and content analyzed. Meetings were held at NJICTL as a forum for participants to discuss their experiences with the project and to explore innovative classroom strategies. At the end of Years 1 and 3, faculty completed an attitudinal survey about their classroom experiences and feelings about PIL. And at the end of the project, each faculty was interviewed by NJICTL staff.

Evaluation/Project Results

The faculty surveys show that, over the three years, all or most faculty report that they increased the diversity of their teaching strategies, and their willingness to explore new ways of teaching; increased their appreciation for faculty influence over students, and their role in motivating students; and made actual changes in their teaching methods, most particularly the use of active learning strategies.

The student surveys did not entirely support the faculty's self-reports of change.

The students acknowledged that there were changes in their faculty's teaching strategies, including an increase in the number and quality of interactions with students; and an increase in their expectations of students' academic performance. However, they report no significant change in the faculty's in-class teaching behaviors. Similarly, the students report little personal change as a result of their participation in the course, and there were no discernible patterns of increased academic achievement (even when controlling for ability).

We asked the faculty about specific changes they had made that were directly attributable to the partnering experience. Their responses show that PIL affected their professional lives in these ways: 13 of 18 faculty report a positive change in their understanding of student learning; 12 of 18 faculty report a positive change in their relationships with colleagues; and 11 of 18 faculty report a positive change in their teaching.

Summary and Conclusions

The lessons we learned from this project fall into four general categories: the motivation of faculty subjects; monitoring the treatment and data collection; the data -- nature, quantity, and sources; and the outcomes assessed.

A challenge posed to the assessment effort here was how to maintain faculty motivation both for participation in the "treatment" and for applying uniform effort in the furnishing of data over three and one half years. Despite the number of handouts and group meetings, faculty maintained diverse ideas about the various treatments -- their purposes and priorities -- as well as about their data provision obligations. While the number of faculty subjects was small, the amount of data collected from each was massive, and the task of analyzing the disparate data sources in a meaningful way was extremely difficult. There is also the matter of getting data from the students of faculty subjects, especially academic achievement data. Not only are the students not particularly motivated to provide such data, but the faculty themselves have major issues on this score..

When all is said and done, questions remain about the appropriateness of the outcomes selected for assessment. In part, the issue is one of the "contextualization" of outcomes, i.e., each faculty member comes to this (or any other) faculty development experience with their own agendas and the effects are often subtle and rather different depending on the individual. When one seeks a few general effects, we fear that you lose some of the unanticipated and individualized impacts that are part of the "real" treatment effects. This suggests that a good deal more attention needs to be focused on the expectations and goals of individual faculty members; and that the assessment effort may need to assess the program treatment relative to these individual goals and expectations.

Appendices

Appendix A	Student Pre-test	Appendix E	Syllabi Analysis
Appendix B	Student Post-test, Year 1	Appendix F	Faculty Survey
Appendix C	Student Post-tests, Years 2/3	Appendix G	Exit Interview
Appendix D	Classroom Observation Protocol		

Summary

The New Jersey Institute for Collegiate Teaching and Learning (NJICTL) assessed the impact of the Katz/Henry Faculty Development Model (known as "Partners in Learning" or PIL) on the teaching behaviors and student learning outcomes of 24 faculty members at four diverse institutions in New Jersey. Data on short term and long term learning outcomes, teaching behaviors, and collegial interactions were collected from a variety of sources over a three year period. The data showed that participation in PIL enhanced faculty's understanding of student learning, enhanced their relationships with colleagues, and caused them to make changes in their classroom teaching.

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PROJECT OVERVIEW

The New Jersey Institute for Collegiate Teaching and Learning (NJICTL) assessed the impact of the Katz/Henry Faculty Development Model on the teaching behaviors and student learning outcomes of 24 faculty members at four diverse institutions in New Jersey. The model, known as Partners in Learning (PIL), has been adopted for use throughout New Jersey and in at least five other states. This project sought to empirically test the impact of PIL on faculty and, most importantly, on student learning.

Data on short term and long term learning outcomes, teaching behaviors, and collegial interactions were collected from a variety of sources over a three year period. The data showed that participation in PIL enhanced faculty's understanding of student learning, enhanced their relationships with colleagues, and caused them to make some changes in their classroom teaching. Despite these critical self-reported changes, there was no discernible pattern of increased student academic achievement in the focal courses of the 24 faculty.

PURPOSE

As the imperatives for faculty development programming have increased dramatically amid severe resource constraints, important questions have surfaced: Does participation in these programs have a positive and sustained impact on faculty teaching and ultimately on student achievement? Is there a link between faculty development and student learning?

Thus far, there have been few attempts to document program outcomes in terms of improvement in teaching or increases in student learning. Evaluations of faculty

development programs based on the Katz/Henry model (Rice and Cheldelin, 1989, 1990; Cheldelin, 1991) indicate that faculty members report significant improvements in their teaching effectiveness; evaluators were, however, unable to verify these self-reports.

This project afforded an opportunity to assess teaching behaviors from the students perspective, the individual faculty's perspective, and the collective faculty's perspective. It documented the ways in which faculty development efforts can alter classroom performance, and in some cases, permanently change the way faculty go about teaching their courses. It also provided a framework within which to assess the utility of a research study for documenting the links between faculty development, teaching and student learning.

The most challenging aspect of the analysis was determining the best method of scrutinizing the myriad data elements in a way that most clearly answered the research questions while isolating the effects of the program. This task was complicated by a sometimes intractable subject pool: 24 faculty on four diverse campuses over a three-year period. At times, the logistical challenges seemed to overwhelm the quasi-experimental controls.

Despite rigorous attempts to maintain a consistent design across the three years, several factors beyond our control intruded. Several faculty were awarded a semester sabbatical during the project, thus interfering with the alternating pattern of classroom observation; one faculty became the director of his institution's Teaching Excellence Center, significantly altering his teaching assignment; one faculty member was forced to withdraw near the end of the project because of issues involving litigation between the faculty's bargaining unit and the institution; and illness forced two faculty out of the

project for a semester, and caused another to drop out completely (after only one semester, and he was replaced by someone who never fully engaged in the project). And perhaps the most pertinent and unexpected change centered on the dynamics of the partnerships themselves: personality conflicts, scheduling difficulties, and other logistical problems caused several of the faculty to "change partners" after only one year of active participation.

While these deviations from the original design complicated the data analysis, they reflected the realistic changes in people's lives over three years. Although frustrating, they added another "human" dimension to this study.

There were also issues regarding the amount of instruction given the faculty participants. The Katz/Henry model stresses the importance of minimal intervention by the project coordinator; the faculty partners set their own agenda and agree to their own rules for observations, interviews, and the sharing of feedback. While this "hands off" strategy supports the nonevaluative norm of the project, it makes even quasi-experimental control of the "treatment" difficult to achieve.

BACKGROUND AND ORIGINS

Partners in Learning: The Katz/Henry Model. The model for the Partners in Learning (PIL) Program evolved during a generation-long collaboration between the late Joseph Katz and Mildred Henry. Based on their work with faculty on 12 campuses initially supported by one of FIPSE's first grants, Katz developed a teaching enhancement program for New Jersey that focuses on student learning while engaging faculty in dialogue about the college classroom. The model has been widely disseminated in the

volume *Turning Professors Into Teachers.*

The structure of PIL is a simple one: faculty pair themselves off, preferably with someone from a different discipline, and periodically sit in on the other's class over the course of a semester or quarter. During the following term, the two switch roles with the observed now doing the observing. The partners meet frequently to discuss their shared experience in the classroom. Observations are emphatically nonjudgmental and are shared only with each other.

At the start of the semester, each of the partners selects three students and interviews them several times over the course of the term. The interviews may follow any pattern, but loosely focus on the question: "how do students learn?"

Once a month, all faculty participants on a campus gather to discuss their experiences. And at the end of the semester, each faculty member writes an essay about the experience. That essay is shared with participants in preparation for later discussion.

The outcomes of participating in PIL are often secondary to the process itself: it brings attention to the process of student learning, to what students are thinking, and to the experiences faculty share. The process rejuvenates instructors, channels the stresses that arise from teaching, and mitigates the sense of being isolated in the classroom. Through the partnerships, two professors get to share a class and examine together the dynamics of that class.

The Katz/Henry model has been unique among faculty development/teaching enhancement programs in that

- it focuses primarily on student learning;
- it is based firmly in the classroom, focusing on the interactions between teacher

and student, and among students themselves;

- it is concerned with the ongoing process of teaching and learning rather than specific goals or outcomes; and
- it is a grassroots, faculty-run operation encouraging innovation and exploration.

In the Fall of 1987, Katz was invited to establish a statewide faculty development program to disseminate PIL among the public and private institutions in New Jersey. Initially supported by the New Jersey Department of Higher Education and administered by the Woodrow Wilson National Fellowship Foundation, the program is now part of the New Jersey Institute for Collegiate Teaching and Learning (NJICTL). Over nearly a decade, PIL programs have operated on 27 campuses in New Jersey alone involving over 500 faculty.

PROJECT DESCRIPTIONS

The Faculty Sample. Beginning in Academic Year 1992-93, twenty-four faculty at four diverse institutions began participation in the project. Faculty from Rutgers University at Newark (Carnegie Research University I) , Bergen Community College, and County College of Morris began in the Fall 1992 semester; faculty from Kean College (a public comprehensive) began one semester later, in Spring 1993.

Table 1 gives a brief description of the faculty, including demographic and professional information. Sixteen of the faculty hold doctorates, 6 hold Master's degrees. Ten faculty are full professors, nine are associate professors, and three are assistant professors. All but one faculty have received tenure. Their teaching experience averages 19 years, ranging from six to 40 years.

In many ways, the participating faculty were a diverse group: there were veteran teachers who had a strong background in faculty development and teaching enhancement initiatives (faculty 11, 21, 23, 26, and 36); others were experienced teachers who had only recently become aware of, and expressed interest in, faculty development (faculty 12, 13, 31, 32, 42, 43); others were relatively new to college teaching and were grappling with teaching issues (16, 24, 25, 46); and others seemed to be somewhat disinterested in teaching enhancement but willing to participate in the project for the stipend or release time it provided (14, 15, 33, 34, 35, 41, 44).

To give us an understanding at the beginning of the project of who the faculty were, we asked two very basic questions: "How did you come to be involved in PIL? What do you expect to gain from this experience?" The veteran faculty developers suggested this was a natural extension of their involvement in teaching initiatives, a way for them to polish their teaching styles using feedback from colleagues at other campuses. Others were intrigued with the notion of trying something new, particularly networking with other teachers and having collegial discussion on classroom issues. There were those who wanted this to be a reality check, to see if their impressions of their teaching were validated by other faculty and students. And several faculty report they were persuaded to participate by their campus faculty development coordinator. Despite this diversity, there seemed to be a relatively high level of enthusiasm, particularly with the prospect of the partnering experience and the opportunity to be involved in a federally-funded research project.

Procedures. There were three components of the PIL model that were incorporated into the work of every faculty pair: (1) ongoing classroom observations; (2)

faculty interviews with students; and (3) collegial dissuasions about teaching based on observations and interviews. Data pertaining to these three components were collected from a variety of sources over the three years of study and were combined to form a large database of quantitative and qualitative information. Quantitative data were entered into an SPSS+ datafile for manipulation.

On each of the four campuses, six faculty were engaged in the project (or, three faculty pairs). The faculty were coupled in interdisciplinary dyads, typically a social scientist and a natural scientist. Deviating slightly from the PIL model, the partnerships were "assigned" rather than self-selected in order to adhere to the research design.

For each of the three academic years, each faculty participant taught a "focal"course, here defined as an introductory-level course that was part of their regular teaching routine. The faculty member who was teaching the focal course was the "observed," and the partner was the "observer." The partners alternated roles by semester, and each faculty pair participated in this routine for two of the three years. These two years were termed "active" years. The third year was termed "fallow," as participation in PIL was not required although data continued to be collected in the focal course.

The twenty-four faculty began the project in two stages -- following the quasi-experimental research design. Two of the three pairs on each campus were active in years 1 and 2, then fallow in year 3. The remaining pair (the control) was fallow in year 1, then active in years 2 and 3. Data were collected on the fallow pairs in year 1 to establish a baseline control (i.e., "pre-intervention"); data were collected on those fallow in year 3 to determine the persistence of change after active participation ceased. Thus, in Year 1, 16

faculty were active, 8 were fallow; in Year 2, all 24 faculty were active; and in Year 3, 8 faculty were active, 16 were fallow. See Table 2 for an illustration of the design of the partnering.

Each member of the pair interviewed at least three students from the focal class three or four times during the semester. Holding true to the Katz/Henry model, the interviews were directed by the faculty member -- there was little intervention on behalf of the research design to control the questions that were asked or the issues discussed. The purpose of the interviews was to provide feedback to the focal faculty about the students' learning experience in the course, supplementing the data gathered on the student post-test survey. After the interviews, the partners met to discuss the feedback from students, the course, and possible teaching strategies.

To record their impressions of the student interviews and meetings with their partner, faculty were asked to make regular entries into a journal. The journals would serve as a running account of their participation in the project, and give the faculty the opportunity to reflect periodically on their experiences. There were two journal entries that were directed by NJICTL, at the beginning and end of the project.

In each faculty participant's active years, the students in the focal course were surveyed via a pre-test and post-test. The pre-test (Appendix A) was administered early in the semester along with a consent form; the post-test (Appendices B and C) was administered during the last week or two of classes, and included an academic achievement question as designed by the focal faculty. Both surveys began with questions seeking demographic data that could be used to allow the introduction of statistical controls into the analysis.

The post-test examined students' preference for class structure and teaching style; interactions with faculty; experiences in the course (principally evaluating the teacher's behavior); intellectual, social, or personal change resulting from the course; teaching behaviors and their impact on learning; and progress made in enhancing academic skills in the course.

The academic achievement questions pertained to specific material covered in the course. They were designed to reflect students' mastery of the subject matter, and were used to compare student group achievement in years 1 and 3, controlling for student ability. Three questions were provided; students chose two to answer.

When the post-tests were collected, the academic achievement question was separated from the survey and returned to the faculty for "anonymous" grading. The faculty used a nine-point scale to assign grades: A+, A, A-; B+, B, B-; and C+, C, and C-. Once the grades were returned, they were incorporated with the post-tests into the student database.

For each student participant, data were collected unobtrusively from each institution's Registrar. To enable some baseline experimental controls, students' grade point average for the semester **prior** to participation and scores on the New Jersey Basic Skills Placement Test were collected. (The state of New Jersey required through 1994 that each public high school student complete a Basic Skills Placement Test prior to entering college; the scales included in this study were English Comprehension, Algebra, Math Computation, and Total Score).

Each faculty participant was also observed by NJICTL staff at least three times per semester teaching their focal course and the observations were recorded according to a

protocol based on Murray's Teaching Behaviors Inventory [TBI] included in Appendix D. Classroom behaviors were recorded according to clarity, enthusiasm, interaction, organization, pacing, disclosure, and rapport. At the end of the project, the protocol was shared with the faculty to get their impressions and feedback.

Syllabi from each faculty's focal course were collected and content analyzed employing the protocol in Appendix E. This data element was particularly difficult to analyze, given that most of the faculty at community colleges use a departmental syllabus that is only a rough outline of topics and readings that follow the text for the course.

During each of the six semesters of the project, monthly meetings were held at NJICTL as a forum for participants to discuss their experiences with the project and to explore innovative classroom strategies. For the first semester, all 24 faculty met as a group. However, in subsequent semesters, difficulties in scheduling required that the large group be broken down into two smaller groups, meeting on successive days. Whereas this undermined the cohesiveness of the group, it aided in assuring that the faculty could attend at least one of the meeting days.

The meetings typically included two components: an informal opportunity to raise questions or report on project-related experiences in the larger group; and a more structured discussion of a reading or case study, usually provided by the NJICTL staff leader (but occasionally by the participants themselves in Year 2). Many of the readings and cases focused in one way or another on active learning strategies in the classroom.

At the end of Years 1 and 3, faculty were asked to complete an attitudinal survey (see Appendix F). The survey includes many items that in content parallel items on the students' post-tests, including an evaluation of the academic skills required for the course;

preferred class structure and teaching style; teaching activities descriptive of the course and important for student motivation; faculty influence on student achievement and motivation; teaching behaviors that affect student learning; and adaptations and changes in the course for subsequent semesters.

After an initial analysis of the data, it became clear that an exit interview with each faculty participant was needed as a frame for interpreting the findings as well as an opportunity for participants to achieve closure on their project participation. The protocol used is found in Appendix G.

EVALUATION: PROJECT RESULTS

In assessing the impact of the PIL model, there seemed to be two questions at the heart of the partnering experience: (1) to what extent, and in what ways, do faculty grow as teachers? and (2) to what extent, and in what ways, do students grow as learners? And further, does this growth (or "change") persist even after participation in PIL ceases? These questions guided the data analysis.

General Trends. Based on the success of the PIL program in institutions throughout New Jersey and overwhelming positive anecdotal information, we had hypothesized that there would be significant changes in the faculty's teaching methods, their perceptions of and attitudes toward students, and their personal and professional relationships with colleagues. The data provide partial support for these hypotheses.

The faculty surveys show that, over the three years, all or most faculty report that they

- increased the diversity of their teaching behaviors and strategies, and their

willingness to explore new ways of teaching [Table 3];

- increased their appreciation for faculty influence over students, and their role in motivating students [Table 4]; and
- made actual changes in their teaching methods, most particularly the use of active learning strategies [Table 3].

The student surveys did not entirely support the faculty's self-reports of change. The students acknowledged that there were changes in the faculty's classroom behavior regarding

- an increase in the number and quality of interactions with students [Table 5]; and
- an increase in their expectations of students' academic performance [Table 4].

However, the students report little personal change as a result of their participation in the course [Table 6], and there were no discernible patterns of increased academic achievement, even when controlling for ability [Table 7].

The last item on the faculty survey was an open-ended question about specific course changes the faculty had made that were directly attributable to the partnering experience. Their responses show that PIL impacted their teaching as follows:

- 13 of 18 faculty report a positive change in their understanding of student learning;
- 12 of 18 faculty report a positive change in their relationships with colleagues; and
- 11 of 18 faculty report a positive change in their teaching.

We investigated further to see if we could detect any distinguishable patterns among faculty based on some demographic, personality or other characteristic. No single such pattern clearly emerged from the data. Reflecting back on the Katz/Henry model, we were able to identify two factors that appeared to distinguish impressionistically among

faculty: perceived *degree of change in teaching/classroom behavior* and *amount of personal reflection about the change process*. Using these two factors, we attempted to determine how (and if) our faculty could be categorized into "types" based on our knowledge of them and the data we collected that reflected the patterns of change we observed.

Using our informal interactions with faculty, their journals, and the exit interviews, we plotted each faculty participant on a 2x2 change/reflection grid (see Table 8). Three clusters emerged; (1) those at the low end of the change and reflection scale, who we labeled "resisters"; (2) those in the middle of the grid, comprising the largest number of faculty, labeled "moderate changers"; and (3) those on the upper end of the scales, labeled "converts." As expected, there were anomalies who did not fit precisely into either category, but these clusters seemed to be a meaningful way to look at the faculty participants.

We then used the students' and faculty self-reports to test our change/reflection designations. We found that our typology was not on the whole supported. Most of the changes that occurred across the three years of the project seem to follow no real pattern. Distinguishing between faculty types based on the students' responses or the faculty self-reports was, with few exceptions, impossible. However, it is informative to look at two groups of faculty that distinguished themselves from the rest: those at the high end of the change/reflection continuum, and those at the opposite end.

There were four faculty (36, 13, 31, and 46) who appeared to exhibit the greatest professional growth -- the greatest changes -- over the three year period. They distinguished themselves from the rest of the faculty in their willingness to reflect on their

own teaching, to consider their students' learning styles, and consequently, to make changes in their teaching strategies. They moved clearly from "teacher-oriented" to "learner-oriented" and the prospects for continued reflective change appear very high.

Of these converts, faculty 36 was the "big winner" for the project. Consistently, he reported the greatest changes in his classroom, and the students reinforced that notion. He was one of the most dedicated participants in the project, was very reflective about his teaching, and most concerned about the quality of his students' learning experience. He is actively involved in both teaching and research, and has taken part in other faculty development initiatives before (and since) PIL at his research university.

At the other end of the change/reflection continuum were faculty that we would describe as resistant, exhibiting very little change from their year 1 starting point. These faculty (15, 34, 41, 44) were, in most ways, out of sync with the rest of the faculty participants. They viewed the issues raised in the project as not pertinent to their classrooms and to their style of teaching. At times antagonistic, but principally distant and removed, these faculty did not avail themselves of the interaction and dialogue that characterized other partnerships.

Faculty 15 exemplifies the "resisters". He was a "negative" presence in the project -- with his partners and with his colleagues at NJICTL meetings. The students rated him low on most scales, and there were almost no positive changes on any variables over the three years. He writes in his journal that he lost interest in the project after year 1, and considering that he was fallow that year, all the momentum he had for his partnerships was lost.

There were two faculty that fall into the "anomaly" category. Faculty 25 seemed,

based on our interactions and observations, to be a moderate changer who was cautiously open to new ideas. She had a stable three-year partnership that was very valuable to her development as a teacher. But her student ratings showed a negative trend across the three years on almost every item. Whereas we anticipated that there would be instances of resistance and conversion, and further that there would be evidence of "disruption" (a dip in student satisfaction as old ways gave way to the new) over the three year period, we were confounded by the consistent indicators of declining student satisfaction.

We initially labeled Faculty 41 as resistant because of the way in which he stayed at the outer fringes of the project. He was cynical about teaching and the impact he had on students. He had difficulty with his partners to the extent that they canceled observations and meetings, and the exchange of feedback was minimal to nonexistent. To our surprise were his student scores; consistently, he scored positive changes over the three years. Looking at the student scores alone, he should be considered one of the biggest converts in the project. However, looking simultaneously at both the quantitative and qualitative data for him provides us with two very different stories.

Several of the faculty experienced an appreciable positive change from year 1 to year 2, then a considerable decline from year 2 to year 3. This trend is particularly evident in Faculty 46. Perhaps this can be attributed to the three year study period; there were reports that sustaining interest over six semesters was a difficult task, and enthusiasm waned as the project progressed.

The largest group of faculty were those we characterized as "moderate changers." These were faculty who, based on personal and professional characteristics, were most representative of the "typical" faculty -- those falling in the middle of the bell curve. This

group was the most difficult to plot with any precision on the change/reflection grid because there were such subtle differences among them.

SUMMARY AND CONCLUSION

The portrait that emerges from our analysis is one of muddied, but perceptibly positive, impact -- largely along the lines that are predictable from the Katz/Henry model. Faculty participants, on the whole, became more learner-centered (understood their students better and got them more involved in the learning process), more collegial in their teaching work , although neither of these developments appeared to directly translate into measurable student achievement gains. We cannot help but speculate about what magnitude of effects might have been discernible had we been able to select a random or at least broadly representative group of faculty for "treatment" as well as a matched control group. Our participants were, after all, largely a self-selected group of faculty who started out with an interest in, and a willingness to invest energy in, their teaching. Many were already well along in their growth trajectory and so were, in many respects, likely to show relatively less dramatic growth and development. We had, in a sense, by our design, stacked the deck against identifying any substantial program impact.

Understanding these limitations as given, we have in the course of this three and one half year assessment effort, nonetheless learned a good bit about the other limitations as well as the strengths of the various elements of our "eclectic" evaluation approach. Reflecting on these, we can identify a series of lessons that FIPSE would do well to share with other project directors. The lessons fall into four general categories: the motivation of faculty subjects; monitoring the treatment and data collection; the data -- nature,

quantity, and sources; and the outcomes which we address in turn below.

Faculty Motivation. The faculty participants in this project began as a highly motivated group. They were after all volunteers engaging in a new, and much heralded, program with the blessings of their campus' chief academic officer. The challenge posed to the assessment effort here was **how to maintain faculty motivation** both for participation in the "treatment" (the PIL regimen of the classroom observation, student interviewing and colleague debriefing) and for applying uniform effort in the furnishing of data **over three and one half years**. In part, the difficulty was posed by the experimental design itself, requiring one third of the group to be "fallow" in the first year (the motivational challenges faced by this subgroup were distinctive). In larger part, the challenge was simply one of **sustaining** interest and effort **over a very long time.** We noticed a clear drop-off in attendance at the monthly project meetings and declines both in the number and length of journal entries.

An assessment project such as this requires thinking through very carefully a multistage plan for faculty motivation that recognizes both the dampening effects of a quasi-experimental design and that explicitly addresses the "natural" dampening effect of time and familiarity.

Monitoring the Treatment and Data Collection. One of the things we learned most clearly from the exit interviews was that participants, despite the number of handouts and number of group meetings, maintained diverse ideas about the treatment -- its purposes and priorities -- as well as about their data provision obligations. It was not, as we learned, merely a matter of stating and restating requirements verbally and in writing; rather, we needed to "monitor" periodically how the treatment was going and the quality

and extent of the data being provided. In particular, a project such as this should during the first year (especially the first semester) check in with each faculty member **on an individual basis** to determine how the treatment is proceeding as well as provide that faculty member with feedback on the quality of data they were providing. These individual interviews would have provided an ideal opportunity to test participant understanding of the project, the treatment, and their role. We depended on the faculty development coordinators at each campus to do that and their work was quite uneven. In sum, the exit interviews (which were not part of the original proposal, but which we realized needed to be done for the participants) should have occurred at least annually and been integrated into the project from the very beginning.

The Nature, Quantity, and Sources of Data. While the number of faculty subjects was small, the amount of data collected from each was massive. There was so much data and, quite candidly, insufficient attention paid **in advance** to how that data would be analyzed. In particular, insufficient prior thought had been given to the relationship between the qualitative data elements and the quantitative data elements. When the portrait that emerged from the two separate streams of data diverged, there was no basis for connecting qualitative and quantitative items, and allowing them to mutually inform each other.

Finally there is the matter of getting data from the students of faculty subjects, especially academic achievement data. This constituted the single most troublesome part of the project. Not only are the students not particularly motivated to provide such data (and addressing the student motivation issue is something that future projects need to do), but the faculty themselves have major issues on this score. Most faculty (1) do not want

to take any extra time from their course to have students provide data that is not part of the course; and (2) are troubled by the ethics of asking students to take on something that is not strictly speaking part of the course (despite the student consent form we used). The major challenge we faced was dealing with faculty on this issue. We succeeded in only a limited fashion; and this deserves much further attention from those who want to undertake serious assessment of the impact of faculty development programming.

The Outcomes Assessed. When all is said and done, the questions remain about the appropriateness of the outcomes selected for assessment. In part, the issue is one of the "contextualization" of outcomes, i.e., each faculty member comes to this (or any other) faculty development experience with their own predispositions and the effects are often subtle and rather different depending on individual agendas. When one seeks a few general effects, we fear that you lose some of the unanticipated and individualized impacts that are part of the "real" treatment effects. This suggests that a good deal more attention needs to be focused on the expectations and goals of individual faculty members; and that the assessment effort may need to asses the program treatment **relative** to these individual goals and expectations.

Table 1. Demographic and Professional Data

Faculty #	Institution	Discipline	Rank	Highest Degree	Degree Granting Institution	Years in College Teaching	Tenured Y/N
11	Bergen	Sociology	Prof	PhD	NYU	24	Y
12	Bergen	Horticulture	Prof	PhD	Maryland	27	Y
13	Bergen	Science	Assoc	PhD	NYU	27	Y
15	Bergen	Math	Assoc	EdD	Rutgers	27	Y
16	Bergen	Sociology	Prof	PhD	Rutgers	16	Y
21	Morris	Psychology	Assoc	MA	Temple	23	Y
23	Morris	Sociology	Prof	PhD	NYU	27	Y
24	Morris	ChemBio	Asst	MS	Fairleigh D.	7	Y
25	Morris	Math	Assoc	MA	Montclair	10	Y
26	Morris	Sociology	Prof	MA	Adelphi	26	Y
31	Rutgers	Math	Assoc	PhD	Illinois	8	Y
32	Rutgers	Psychiatry	Prof	PhD	Columbia	7	Y
33	Rutgers	Psychology	Assoc	PhD	Rutgers	6	Y
34	Rutgers	Sociology	Assoc	PhD	Wisconsin	12	Y
35	Rutgers	Poli Sci	Prof	PhD	Colorado	19	Y
36	Rutgers	Biology	Prof	PhD	Cornell	20	Y
41	Kean	History	Prof	PhD	Columbia	26	Y
42	Kean	Math	Assoc	PhD	Yeshiva	21	Y
43	Kean	Chemistry	Prof	PhD	SUNY	17	Y
44	Kean	Biology	Assoc	MA	Columbia	40	Y
45	Kean	Math	Asst	MA	Kean	28	Y
46	Kean	Biology	Asst	PhD	Colorado	6	N

Data were not provided for Faculty 14

Table 2. Partnering: Demographics and Schedule of Participation

Year 1			Year 2			Year 3		
Instructor	Discipline	Gender	Instructor	Discipline	Gender	Instructor	Discipline	Gender
11	sociologist	male	11	sociologist	male	11	sociologist	male
12	horticulturist	male	12	horticulturist	male	12	horticulturist	male
13	biologist	female	13	biologist	female	13	biologist	female
14	mathematician	male	15	statistician	male	14	mathematician	male
15	statistician	male	14	mathematician	male	15	statistician	male
16	sociologist	male	16	sociologist	male	16	sociologist	male
21	psychologist	female	21	psychologist	female	21	psychologist	female
22 *	biologist	male	27	mathematician	female	27	mathematician	female
23	sociologist	male	23	sociologist	male	23	sociologist	male
24	biologist	female	24	biologist	female	24	biologist	female
25	mathematician	female	25	mathematician	female	25	mathematician	female
26	sociologist	male	26	sociologist	male	26	sociologist	male
31	mathematician	male	31	mathematician	male	31	mathematician	male
32	psychologist	male	32	psychologist	male	32	psychologist	male
33	psychologist	male	33	psychologist	male	33	psychologist	male
34	sociologist	male	34	sociologist	male	34	sociologist	male
35	political scientist	male	35	political scientist	male	35	political scientist	male
36	biologist	male	36	biologist	male	36	biologist	male
41	historian	male	41	historian	male	41	historian	male
42	mathematician	female	44	biologist	male	44	biologist	male
43	chemist	male	42	mathematician	female	42	mathematician	female
44	biologist	male	46	biologist	female	43	chemist	male
45	mathematician	female	43	chemist	male	45	mathematician	female
46	biologist	female	45	mathematician	female	46	biologist	female

* Instructor 22 dropped out of the project after the first semester because of health reasons; replaced by Instructor 27

Shading indicates ACTIVE participation

Table 3. Faculty Survey: Changes in Course Due to PIL

	Changes in Course This Semester			Work on Next Time			Change from PIL		
	Teaching Methods	Delivery Systems	Interpersonal	Teaching Methods	Delivery Systems	Interpersonal	Student Learning	Teaching	Relationships with Colleagues
11		+		+	+	+	+	+	
12				+	+		+	+	
13	+	+	+	+	+		+	+	+
14	n/a			n/a			n/a		
15							+		+
16	+	+	+	+	+	+			+
21				+	+	+	+		
23		+	+	+	+	+	+	+	
24	n/a			n/a			n/a		
25	+		+	+	+	+	+		+
26	+	+	+	+	+	+			+
31	+			+	+		+	+	+
32	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+		+	+	+
34				+	+	+		+	+
35	n/a			n/a			n/a		
36	+		+	+	+	+	+	+	+
41	+	+	+	+			+	+	+
42	n/a			n/a			n/a		
43				+	+		+	+	
44	n/a				+				
45	n/a			n/a			n/a		
46	+	+		+	+				

+: positive response for years 1, 2, or 3
no symbol: no response for years 1, 2, or 3
n/a: no data available

Table 4. Faculty Survey: Changes from Year 1 to 3 By Variable

	Academic Skills Required	Teaching Activities: Descriptive of You	Teaching Activities: Important for Student Motivation	Faculty Influence	Teaching Techniques: Characteristic of You	Teaching Techniques: Effective for Improving Performance
11	3+	3+	3+	0	0	5+
12	6+	1+	0	2+	0	0
13	6+	3+	4+	3+	0	0
14						
15	3+	1+	3+	2+	0	3+
16	6+	6+	4+	3+	1+	4+
21	3+	4+	6+	2+	0	1+
23	2+	0	0	1+	3+	0
24						
25	6+	5+	2+	4+	2+	4+
26	3+	1+	4+	2+	1+	4+
31	3+	0	1+	0	0	3+
32	7+	1+	1+	3+	0	1+
33	4+	3+	2+	2+	1+	0
34	7+	1+	4+	3+	0	3+
35						
36	6+	1+	2+	1+	0	0
41	9+	4+	6+	3+	0	0
42						
43	3+	4+	7+	3+	0	5+
44						
45						
46	6+	1+	0	1+	0	1+

Symbols represent numbers of changes from year 1 to year 3 for each category

Table 5. Student Survey: Experiences in this Course by Construct

	11			12			13			14			15			16		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Course relevance/personal growth	3.73	3.62	3.49	3.84	3.93	3.93	3.85	3.65	3.65	2.86	2.87		2.84	2.21	2.53	3.43	3.76	3.41
Instructor expectations/clarity	4.51	4.3	4.23	3.82	3.68	3.77	4.23	4.16	4.05	3.99	3.77		3.62	3.09	2.92	4.55	4.74	4.49
Faculty/student interactions/progress	3.58	3.73	4.18	3.85	3.67	4.05	3.67	3.2	3.52	3.53	3.19		3.53	2.51	2.71	3.84	3.93	3.63
Classroom interactions	4.58	4.4	4.19	3.91	4.08	3.97	3.86	3.55	3.62	3.92	3.75		4.11	3.42	3.13	4.43	4.75	4.29
Student input	4.32	4.23	4.18	4.17	4.13	4.19	3.73	3.74	3.9	3.41	3.48		3.74	2.93	3.13	4.09	4.5	3.9
	21			23			24			25			26					
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3			
Course relevance/personal growth	3.59	3.56	3.64	3.42	3.64	3.44	3.34	4.22		3.26	2.93		3.34	3.21	3.51			
Instructor expectations/clarity	4.49	4.33	4.4	4.14	4.18	4.23	3.91	4.67		4.26	3.61		4.06	3.95	4.25			
Faculty/student interactions/progress	3.99	3.86	3.88	3.55	3.58	3.47	4.04	4.9		4.08	3.37		3.46	3.3	3.44			
Classroom interactions	4.2	4.42	4.44	4.35	4.31	4.23	4.39	5		4.15	3.68		4.38	4.24	4.35			
Student input	4.12	4.14	4.27	4.2	4.06	4	3.69	4.75		3.78	3.22		4.18	4.03	4.31			
	31			32			33			34			35			36		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Course relevance/personal growth	2.97	2.93		3.4	3.51	3.4	3.82	3.68	3.8	3.77	3.69	3.66	3.45			3.6	3.74	3.74
Instructor expectations/clarity	4.11	4.16		3.94	4	4.49	4.22	4.18	4.42	4.57	4.4	4.32	3.23			4.28	4.23	4.51
Faculty/student interactions/progress	3.33	3.76		3.3	3.37	3.59	3.28	3.21	3.43	3.99	3.78	3.93	3.55			3.58	3.83	4
Classroom interactions	3.97	4.22		4.19	4.33	4.44	4.37	4.14	4.3	4.52	4.38	4.39	4.21			4.42	4.53	4.61
Student input	3.2	3.28		4.03	4.25	4.33	4.19	4.24	4.2	4.3	4.39	4.08	4.06			3.89	4.21	4.23
	41			42			43			44			45			46		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Course relevance/personal growth	2.85	2.9	3.21	3.5	3.01		3.49	3.41	3.21	2.8			2.51	2.43		3.13	3.39	2.72
Instructor expectations/clarity	4.03	3.84	4.2	4.04	4.38		4.21	4.32	4.37	3.89			3.74	3.44		4.15	4.47	4.16
Faculty/student interactions/progress	2.96	2.95	3.42	3.89	4.16		3.88	3.84	3.84	3.62			3.45	3.18		3.44	3.63	3.65
Classroom interactions	4.13	3.91	4.23	4.11	4.29		4.21	4.45	4.39	4.13			4.06	3.71		3.97	4.3	4.14
Student input	3.09	3.24	3.49	3.23	3.3		3.75	3.64	3.59	3.57			3.04	2.95		3.69	4.13	3.61

1=Disagree Strongly; 5=Agree Strongly

Table 6. Student Survey: Ways Students Have Changed Because of This Class

	Cognitive			Affective			Negative Responses		No Change	
Instructor	Year 1	Year 3	% change	Year 1	Year 3	% change	Year 1	Year 3	Year 1	Year 3
11	45.34	57.79	12.45	17.40	10.00	-7.40	0.00	1.11	29.33	26.67
12	33.84	29.17	-4.67	20.52	8.33	-12.19	0.00	0.00	23.08	62.50
13	39.72	56.48	16.76	6.39	10.19	3.80	0.00	5.56	48.94	21.30
14										
15	31.36	22.21	-9.15	5.88	4.44	-1.44	5.88	26.67	49.02	13.33
16	44.87	39.50	-5.37	10.25	13.58	3.33	0.00	0.00	20.51	17.28
21	31.75	42.22	10.47	0.00	13.34	13.34	0.00	0.00	61.90	31.11
23	28.07	54.77	26.70	17.54	14.28	-3.26	0.00	0.00	45.61	30.95
24										
25	32.13	24.56	-7.57	17.85	7.01	-10.84	2.38	19.30	45.26	29.82
26	28.20	35.06	6.86	15.38	21.66	6.28	0.00	1.67	48.73	33.34
31	35.53	42.24	6.71	3.95	7.32	3.37	2.64	6.10	43.41	39.02
32	28.78	37.19	8.41	11.36	16.67	5.31	2.28	1.28	49.25	11.54
33	37.70	40.75	3.05	17.84	15.10	-2.74	0.34	1.13	37.04	39.32
34	50.80	44.44	-6.36	14.29	20.83	6.54	0.00	2.78	28.57	31.94
35										
36	39.03	51.52	12.49	17.88	11.97	-5.91	1.62	2.27	34.96	15.15
41	19.30	35.01	15.71	3.51	5.00	1.49	1.75	0.00	3.51	55.00
42										
43	30.37	33.32	2.95	4.17	11.90	7.73	0.00	4.76	52.08	40.48
44										
45	14.02	14.58	0.56	1.74	12.50	10.76	17.54	31.25	59.65	31.25
46	36.27	32.46	-3.81	5.88	4.38	-1.50	7.84	14.04	18.62	39.47

Numbers represent percentages of "yes" responses

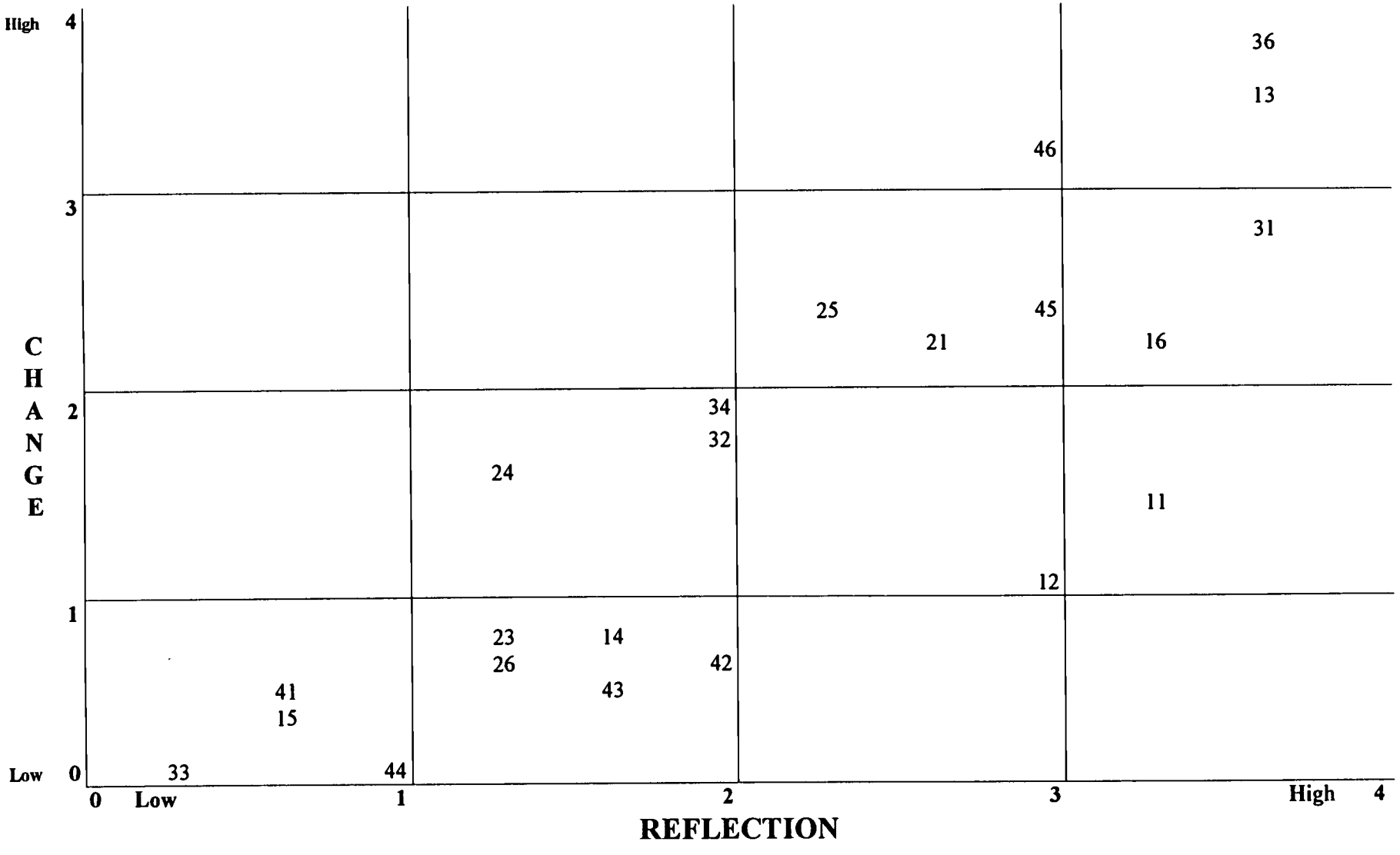
Table 7. Student Survey: Academic Achievement Scores By Faculty

Faculty	Academic Achievement Mean Scores Year 1	Year 3	Difference	F	Significance
11	7.160	7.429	0.269	1.744	0.1844
12	5.692	6.667	0.974	0.223	0.6442
13	8.046	6.750	-1.295	5.924	0.0195
14	5.083	7.400	2.317	2.366	0.1445
16	7.941	6.421	-1.520	5.526	0.0247
21	7.308	8.500	1.192	1.828	0.1941
23	7.250	6.643	-0.607	0.575	0.4558
24	5.357	4.000	-1.357	1.628	0.2166
25	5.000	7.588	2.588	7.450	0.0015
26	7.870	5.500	-2.370	15.239	0.0003
33	6.000	7.076	1.076	7.992	0.0056
36	6.406	5.091	-1.315	4.184	0.0176
41	3.200	4.769	1.569	4.179	0.0512

Shading indicates a significance level of less than .05

Mean Scores Grading Scale: 1=A+; 2=A; ... 9=C-. Missing data and incomplete responses were not included.

Table 8. Change/Reflection Grid



Appendix A
Student Pre-Test

PARTNERS IN LEARNING RESEARCH PROJECT
STUDENT INFORMED CONSENT FORM

Your college is participating in a research project designed to assess the impact of the "Partners in Learning" ("PIL") program on teaching and learning. The "PIL" program is designed to improve teaching and learning in higher education by bringing faculty members together as partners to work on their teaching. The research project, sponsored by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) is being conducted by the New Jersey Institute for Collegiate Teaching and Learning (NJICTL) which is housed at Seton Hall University. A critical aspect of this research project is understanding students' experiences in the classroom.

Your institution has authorized us to contact you to solicit your participation in this project. Your privacy as a study participant will be fully respected. While members of the immediate research team will collect information from you regarding your experiences in this class and your educational goals, your responses will remain confidential and your name will not be associated with the results in any way.

As part of this research project we ask that you respond to a brief survey instrument, given during class time, at the beginning and end of the term. Completion of the two instruments will take at least an hour but no more than two hours. We also request access to your registrar's data (NJ Basic Skills test scores and college grade point average). For most of you, participation in this project will end at the end of this term. A few of you, however, will be contacted regarding longer-term participation.

We expect that you will find your involvement in this research project interesting and beneficial. Nevertheless, we want to emphasize that you may refuse to answer any questions or decline the use of data without penalty of any kind. You are free to withdraw your consent and to discontinue participation at any time, without prejudice. If you have any questions or comments regarding specific aspects of the research project, please feel free to contact Dr. Martin Finkelstein, Director of NJICTL, at (201) 761-9704. If you are interested in your institution's participation, contact your Academic Dean.

****

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the Office of Grants and Research Services. The telephone number of the office is (201) 378-9806.

I have read the material above, and any questions I asked have been answered to my satisfaction. I agree to participate in this activity and authorize the research team to attain appropriate data from the registrar, realizing that I may withdraw without prejudice at any time.

_____ _____
Print Name Date

_____
(Signature)

PARTNERS IN LEARNING: THE STUDENT'S EXPERIENCE

Instructions:

Unless otherwise indicated, please mark an "X" next to the answer you choose.

BACKGROUND AND COLLEGE GOALS

1. What is your sex?

   __Female
   __Male

2. Age on your last birthday? _____

3. Your Racial/Ethnic Identification?

   __African American/Black
   __Asian American/Oriental
   __Caucasian/White (Non-Hispanic)
   __Latino(a)/Hispanic
   __Native American
   __Other _____

4. Citizenship Status:

   __U.S.
   __Other

5. What is the highest level of formal education your parents have? (Mark one in each column)

	Mother	Father
Grammar School or less	__	__
Some High School	__	__
High School Graduate	__	__
Some College	__	__
College Degree	__	__
Post-Graduate Degree	__	__

6. What is your current enrollment status at this college/university?

   __Full-Time Student
   __Part-Time Student

7. Why did you enter this college? (Please mark only one.)

   __No definite reason in mind
   __To take a few job-related courses
   __To take courses necessary for transferring to another college
   __To obtain or maintain a certification
   __To complete a vocational/technical program
   __To obtain an Associate Degree
   __To obtain a Bachelor's Degree

8. What is the highest academic degree that you currently plan to get?

   __None
   __Associate Degree (A.A. or equivalent)
   __Bachelor's Degree (B.S., B.A., etc.)
   __Master's Degree (M.A., M.S., etc.)
   __Doctoral Degree (Ph.D. or Ed.D.)
   __Medical Degree (M.D., D.D.S., or D.V.M.)
   __Law Degree (LL.B. or J.D.)
   __Other (describe):_____

9. How sure are you that you will get an undergraduate degree?

   __Completely sure I will get my degree from this institution

   __Completely sure I will get my degree, but not necessarily from this institution

   __Not completely sure I will get my degree

10. Do you plan to enroll at this institution next semester?

    __Yes
    __No
    __Not sure

11. What is your current class standing?

    __Freshman
    __Sophomore
    __Junior
    __Senior
    __Other:_____

12. What is/are the major reason(s) you took this course? (mark all that apply)

    __My advisor suggested it
    __It is required for my major
    __It fulfills a general education requirement
    __It sounded interesting
    __It was the only class available
    __It is a free elective

13. Students have different likes when it comes to class structure and teaching style. Please look over the two phrases at each letter below and mark an "X" in the scale closest to the end most like your choice. For example, in item A if you like essay tests much more than multiple choice tests, you would place an "X" on the far left side; if you don't like one phrase more than the other or if you like them both the same amount, you would place an "X" in the middle.

A.	Essay tests __:__:__:__:__:__:__	True-false or multiple choice tests
B.	Required Attendance for class __:__:__:__:__:__:__	Attendance not required
C.	Doing a project with several others in the class __:__:__:__:__:__:__	Doing a project by yourself
D.	Professors who leave it up to you to keep up with your work __:__:__:__:__:__:__	Professors who often check up on you to make sure that your work is being done properly and on time
E.	A class that presents a clear point of view __:__:__:__:__:__:__	A class that presents different points of view and leaves it up to you to develop your own point of view
F.	A class that stresses your independence even though the assignments may be vague and you are unsure of what's expected __:__:__:__:__:__:__	A class that stresses clear requirements even though it may restrict your independence
G.	Lecture classes __:__:__:__:__:__:__	Discussion classes

Appendix B
Student Post-Test
Year 1

Instructions:

Unless otherwise indicated, please mark an "X" next to the answer you choose.

PART I. BACKGROUND AND COLLEGE GOALS

1. What is your sex?
   ___Female
   ___Male

2. Age on your last birthday? _____

3. Your Racial/Ethnic Identification?
   ___African American/Black
   ___Asian American/Oriental
   ___Caucasian/White (Non-Hispanic)
   ___Latino(a)/Hispanic
   ___Native American
   ___Other _____

4. Citizenship Status:
   ___U.S.
   ___Other

5. What is the highest level of formal education your parents have? (Mark one in each column)

	Mother	Father
Grammar School or less	___	___
Some High School	___	___
High School Graduate	___	___
Some College	___	___
College Degree	___	___
Post-Graduate Degree	___	___

6. What is your current enrollment status at this college/university?
   ___Full-Time Student
   ___Part-Time Student

7. Why did you enter this college? (Please mark only one.)
   ___No definite reason in mind
   ___To take a few job-related courses
   ___To take courses necessary for transferring to another college
   ___To obtain or maintain a certification
   ___To complete a vocational/technical program
   ___To obtain an Associate Degree
   ___To obtain a Bachelor's Degree

8. What is the highest academic degree that you currently plan to get?
   ___None
   ___Associate Degree (A.A. or equivalent)
   ___Bachelor's Degree (B.S., B.A., etc.)
   ___Master's Degree (M.A., M.S., etc.)
   ___Doctoral Degree (Ph.D. or Ed.D.)
   ___Medical Degree (M.D., D.D.S., or D.V.M.)
   ___Law Degree (LL.B. or J.D.)
   ___Other (describe):_____

9. How sure are you that you will get an undergraduate degree?
   ___Completely sure I will get my degree from this institution
   ___Completely sure I will get my degree, but not necessarily from this institution
   ___Not completely sure I will get my degree

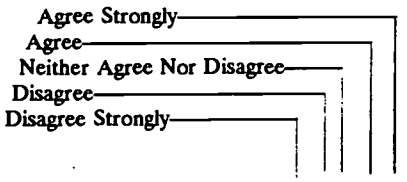
10. Do you plan to enroll at this institution next semester?
    ___Yes
    ___No
    ___Not sure

11. Students have different likes when it comes to class structure and teaching style. Please look over the two phrases at each letter below and mark an "X" in the scale closest to the end most like your choice. For example, in item A if you like essay tests much more than multiple choice tests, you would place an "X" on the far left side; if you don't like one phrase more than the other or if you like them both the same amount, you would place an "X" in the middle.

A.	Essay tests	___:___:___:___:___:___:___	True-false or multiple choice tests
B.	Required Attendance for class	___:___:___:___:___:___:___	Attendance not required
C.	Doing a project with several others in the class	___:___:___:___:___:___:___	Doing a project by yourself
D.	Professors who leave it up to you to keep up with your work	___:___:___:___:___:___:___	Professors who often check up on you to make sure that your work is being done properly and on time
E.	A class that presents a clear point of view	___:___:___:___:___:___:___	A class that presents different points of view and leaves it up to you to develop your own point of view
F.	A class that stresses your independence even though the assignments may be vague and you are unsure of what's expected	___:___:___:___:___:___:___	A class that stresses clear requirements even though it may restrict your independence
G.	Lecture classes	___:___:___:___:___:___:___	Discussion classes

PART II. EXPERIENCES IN THIS COURSE

12. Listed below are various sentences about this course and its instructor. Please show the extent to which you agree or disagree with each by circling the number that best fits your answer. 1 = strong disagreement and 5 = strong agreement.



A. The presentation of material in this course is well organized. 1 2 3 4 5

B. The instructor keeps students informed of their progress. 1 2 3 4 5

C. I am developing more confidence in myself because of this class. 1 2 3 4 5

D. The instructor checks to see if students understand before going on to new things. 1 2 3 4 5

E. I feel I am not performing up to my potential in this course. 1 2 3 4 5

F. The instructor often points out practical applications and concepts. 1 2 3 4 5

G. Students in this course are free to disagree and ask questions. 1 2 3 4 5

H. This course requires my best intellectual effort. 1 2 3 4 5

I. The instructor gives individual attention to students in the class. 1 2 3 4 5

J. The instructor asks for more than students can get done. 1 2 3 4 5

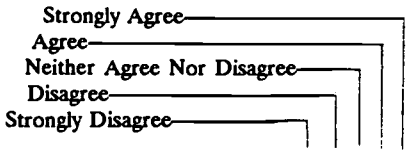
K. I like this subject more because of taking this class. 1 2 3 4 5

L. Through this course I am learning to know the main points and central issues in this field. 1 2 3 4 5

M. The instructor is not willing to meet and help students outside class. 1 2 3 4 5

N. I have a strong desire to take this course. 1 2 3 4 5

O. I am gaining a better understanding of myself through this course. 1 2 3 4 5



P. The instructor criticizes students when they make errors. 1 2 3 4 5

Q. The instructor is well prepared for each class. 1 2 3 4 5

R. The instructor is receptive to discussion outside class. 1 2 3 4 5

S. The instructor maintains good feeling in the class. 1 2 3 4 5

T. The instructor motivates me to do my best work. 1 2 3 4 5

U. The instructor relates course material to real life situations. 1 2 3 4 5

V. The instructor does not use class time efficiently. 1 2 3 4 5

W. The instructor answers student questions in a way that helps students. 1 2 3 4 5

X. Through this course I am learning to value my viewpoints. 1 2 3 4 5

Y. The instructor isn't sensitive to student difficulty with course work. 1 2 3 4 5

Z. Through this course I am gaining a good understanding of concepts/principles in this field. 1 2 3 4 5

AA. The instructor treats students with respect. 1 2 3 4 5

BB. The instructor assigns a reasonable amount of work to the class. 1 2 3 4 5

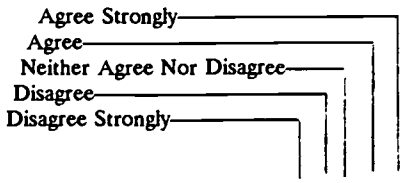
CC. The instructor uses students' questions and ideas in the lecture. 1 2 3 4 5

DD. The instructor doesn't stimulate my intellectual curiosity. 1 2 3 4 5

EE. The instructor has teacher-student discussions as opposed to just question-answer sessions. 1 2 3 4 5

FF. I am increasing my awareness of my own interests and talents through this course. 1 2 3 4 5

GG. The instructor makes good use of examples and illustrations to get across difficult points. 1 2 3 4 5



HH. The instructor praises students for good ideas. 1 2 3 4 5

II. I am interested in doing outside reading about the course material. 1 2 3 4 5

JJ. The instructor acknowledges all questions when possible. 1 2 3 4 5

KK. The instructor's explanations are unclear. 1 2 3 4 5

LL. I am learning to apply principles from this course to new situations. 1 2 3 4 5

MM. The instructor suggests specific ways students can improve. 1 2 3 4 5

NN. The instructor presents challenging, thought-provoking ideas. 1 2 3 4 5

OO. The instructor shows a genuine concern for students. 1 2 3 4 5

PP. Course requirements are clear. 1 2 3 4 5

QQ. The instructor is confused by un-expected questions. 1 2 3 4 5

RR. I am becoming more interested in the subject matter of this course. 1 2 3 4 5

SS. The instructor encourages students to ask questions or make comments. 1 2 3 4 5

TT. The instructor uses concrete, everyday examples to explain concepts and principles. 1 2 3 4 5

UU. The instructor doesn't really listen to what students have to say. 1 2 3 4 5

VV. I am stimulated to discuss related topics outside of class. 1 2 3 4 5

WW. The instructor knew when students didn't understand a particular point. 1 2 3 4 5

XX. I feel free to ask questions or express my opinions. 1 2 3 4 5

YY. The instructor often fails to define new or unfamiliar terms. 1 2 3 4 5

ZZ. The instructor encourages student comments even when they turn out to be incorrect or irrelevant. 1 2 3 4 5

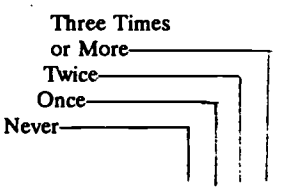
13. What is/are the major reason(s) you took this course? (choose one)

___My advisor suggested it
___It is required for my major
___It fulfills a general education requirement
___It sounded interesting
___It was the only class available
___It is a free elective

14. Were you interviewed during this semester, by your instructor or by another faculty member about your experiences, for the "Partners in Learning" Program?

___Yes ___No

15. We are interested in how you relate to faculty on this campus. How often have you done each of the following with the faculty member teaching this course since the beginning of the semester?



A. Socialized informally 0 1 2 3

B. Discussed your career plans and opportunities 0 1 2 3

C. Discussed a personal problem 0 1 2 3

D. Discussed academic issues outside of class 0 1 2 3

E. Discussed and received helpful feedback on your tests, assignments, and/or academic work 0 1 2 3

16. Please list up to three ways in which you have changed because of this class (e.g. developed new skills, changed world view, are less interested in the subject, behave differently, etc.). (If there is none, say so).

17. Listed below are some statements teachers have used to describe the most important things they do to assist student learning. Please circle the appropriate number in the first column to show the extent to which the instructor of this course did these things, and in column 2, circle the number which shows how helpful you think the action is in helping you learn.

	The instructor did this: (Very Often=5, Often=4, Sometimes=3, Rarely=2, Never=1)	As a way to help me learn, this is: (Very Helpful=5, Helpful=4, Somewhat Helpful=3, Not Helpful=2, Not At All Helpful=1)
A. Encourages student criticism of instructor's ideas	1 2 3 4 5	1 2 3 4 5
B. Provides extra help sessions	1 2 3 4 5	1 2 3 4 5
C. Encourages students to discuss ideas that go beyond class readings	1 2 3 4 5	1 2 3 4 5
D. Provides structure to clarify the course material	1 2 3 4 5	1 2 3 4 5
E. Finds ways to motivate or interest student	1 2 3 4 5	1 2 3 4 5
F. Shows enthusiasm for the subject	1 2 3 4 5	1 2 3 4 5
G. Relies primarily on classroom discussion as a teaching technique	1 2 3 4 5	1 2 3 4 5
H. Shows personal concern and empathy for students	1 2 3 4 5	1 2 3 4
I. Tries to provide a role model for students	1 2 3 4 5	1 2 3 4 5
J. Frequently departs from prepared materials during class to pursue questions or comments from students	1 2 3 4 5	1 2 3 4 5

18. To what extent do you feel each of the following (1) Describes this instructor, and (2) is important to your interest/motivation in a class? 1 = not at all; 10 = a great deal.

	Descriptive of This Instructor	Important to Your Interest/Motivation
A. Stimulate student interest	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10
B. Present material enthusiastically	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10
C. Meet course objectives	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10
D. Be respectful of students	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10
E. Motivate students to attain high standards	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10
F. Be prepared and organized	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10
G. Be intellectually challenging	1...2...3...4...5...6...7...8...9...10	1...2...3...4...5...6...7...8...9...10

19. Listed below are a variety of academic skills and talents that can be improved or strengthened through particular classes. Please circle the number which best matches (1) the amount of progress you feel you have made in each of these areas as a result of this course, and (2) how important this skill is to you and your goals for college.

	Amount of Progress You've Achieved as a Result of This Course Much Progress — Some Progress — Little Progress — No Progress	Importance of Skill to You Very Important — Somewhat Important — Not Very Important — Not At All Important
A. Factual knowledge: acquiring new terms, methods, or information	1 2 3 4	1 2 3 4
B. Skills Training: learning specific tasks or professional skills	1 2 3 4	1 2 3 4
C. Principles: learning new theories, generalizations, and ways of organizing information	1 2 3 4	1 2 3 4
D. Application: learning how to use new information, concepts, and methods to solve current problems	1 2 3 4	1 2 3 4
E. Creativity: developing creative capacities -- learning to be more expressive or learning how to approach and solve problems in a new way	1 2 3 4	1 2 3 4
F. Appreciation: gaining greater sensitivity to specific intellectual, scientific, or artistic endeavors	1 2 3 4	1 2 3 4
G. Self-Understanding: acquiring a better sense of myself and/or relationships with others	1 2 3 4	1 2 3 4
H. Self-Management: learning how to plan more effectively for and/or control personal, academic, and/or professional life	1 2 3 4	1 2 3 4
I. Critical Thinking: improving my rational thinking, problem solving, and decision making capacity	1 2 3 4	1 2 3 4
J. Communication: developing skill in expressing myself orally or in writing	1 2 3 4	1 2 3 4

Appendix C
Student Post-Test
Years 2 and 3

Name: _____ (Please Print Legibly)

This information is requested for record-keeping purposes only. It will remain confidential—neither your name nor any other identifying characteristic will ever be associated with your responses.

THIS PAGE WILL BE TORN OFF THE SURVEY ONCE COLLECTED TO ASSURE CONFIDENTIALITY.

Instructions:

Unless otherwise indicated, please mark an "X" next to the answer you choose.

PART I. BACKGROUND AND COLLEGE GOALS

1. What is your sex?
   ___Female
   ___Male

2. Age on your last birthday? _____

3. Your Racial/Ethnic Identification?
   ___African American/Black
   ___Asian American/Oriental
   ___Caucasian/White (Non-Hispanic)
   ___Latino(a)/Hispanic
   ___Native American
   ___Other _____

4. Do you plan to enroll at this institution next semester?
   ___Yes
   ___No
   ___Not sure

5. What is your current class standing?
   ___Freshman
   ___Sophomore
   ___Junior
   ___Senior
   ___Other:_____

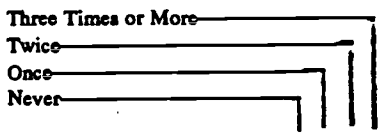
6. Were you interviewed during this semester, by your instructor or by another faculty member, about your experiences for the "Partners in Learning" Program?

   ___Yes ___No

7. Students have different likes when it comes to class structure and teaching style. Please look over the two phrases at each letter below and mark an "X" in the scale closest to the end most like your choice. For example, in item A if you like essay tests much more than multiple choice tests, you would place an "X" on the far left side; if you don't like one phrase more than the other or if you like them both the same amount, you would place an "X" in the middle.

A. Essay tests	___:___:___:___:___:___:___	True-false or multiple choice tests
B. Required Attendance for class	___:___:___:___:___:___:___	Attendance not required
C. Doing a project with several others in the class	___:___:___:___:___:___:___	Doing a project by yourself
D. Professors who leave it up to you to keep up with your work	___:___:___:___:___:___:___	Professors who often check up on you to make sure that your work is being done properly and on time
E. A class that presents a clear point of view	___:___:___:___:___:___:___	A class that presents different points of view and leaves it up to you to develop your own point of view
F. A class that stresses your independence even though the assignments may be vague and you are unsure of what's expected	___:___:___:___:___:___:___	A class that stresses clear requirements even though it may restrict your independence
G. Lecture classes	___:___:___:___:___:___:___	Discussion classes

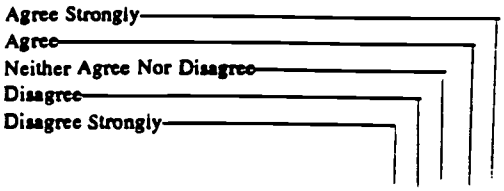
8. We are interested in how you relate to faculty on this campus. How often have you done each of the following with the faculty member teaching this course since the beginning of the semester?



A. Socialized informally	0 1 2 3
B. Discussed your career plans and opportunities	0 1 2 3
C. Discussed a personal problem	0 1 2 3
D. Discussed academic issues outside of class	0 1 2 3
E. Discussed and received helpful feedback on your tests, assignments, and/or academic work	0 1 2 3

PART II. EXPERIENCES IN THIS COURSE

9. Listed below are various sentences about this course and its instructor. Please show the extent to which you agree or disagree with each by circling the number that best fits your answer. 1 = strong disagreement and 5 = strong agreement.



A. The presentation of material in this course is well organized. 1 2 3 4 5

B. The instructor keeps students informed of their progress. 1 2 3 4 5

C. I am developing more confidence in myself because of this class. 1 2 3 4 5

D. The instructor checks to see if students understand before going on to new things. 1 2 3 4 5

E. I feel I am not performing up to my potential in this course. 1 2 3 4 5

F. The instructor often points out practical applications and concepts. 1 2 3 4 5

G. Students in this course are free to disagree and ask questions. 1 2 3 4 5

H. This course requires my best intellectual effort. 1 2 3 4 5

I. The instructor gives individual attention to students in the class. 1 2 3 4 5

J. The instructor asks for more than students can get done. 1 2 3 4 5

K. I like this subject more because of taking this class. 1 2 3 4 5

L. Through this course I am learning to know the main points and central issues in this field. 1 2 3 4 5

M. The instructor is not willing to meet and help students outside class. 1 2 3 4 5

N. I have a strong desire to take this course. 1 2 3 4 5

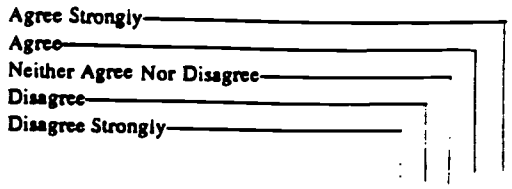
O. I am gaining a better understanding of myself through this course. 1 2 3 4 5

P. The instructor criticizes students when they make errors. 1 2 3 4 5

Q. The instructor is receptive to discussion outside class. 1 2 3 4 5

R. The instructor motivates me to do my best work. 1 2 3 4 5

S. The instructor relates course material to real life situations. 1 2 3 4 5



T. The instructor does not use class time efficiently. 1 2 3 4 5

U. The instructor assigns a reasonable amount of work to the class. 1 2 3 4 5

V. The instructor uses students' questions and ideas in the lecture. 1 2 3 4 5

W. The instructor has teacher-student discussions as opposed to just question-answer sessions. 1 2 3 4 5

X. I am increasing my awareness of my own interests and talents through this course. 1 2 3 4 5

Y. The instructor makes good use of examples and illustrations to get across difficult points. 1 2 3 4 5

Z. The instructor praises students for good ideas. 1 2 3 4 5

AA. I am interested in doing outside reading about the course material. 1 2 3 4 5

BB. The instructor's explanations are unclear. 1 2 3 4 5

CC. I am learning to apply principles from this course to new situations. 1 2 3 4 5

DD. The instructor suggests specific ways students can improve. 1 2 3 4 5

EE. The instructor shows a genuine concern for students. 1 2 3 4 5

FF. Course requirements are clear. 1 2 3 4 5

GG. The instructor uses concrete, everyday examples to explain concepts and principles. 1 2 3 4 5

HH. The instructor doesn't really listen to what students have to say. 1 2 3 4 5

II. I am stimulated to discuss related topics outside of class. 1 2 3 4 5

JJ. I feel free to ask questions or express my opinions. 1 2 3 4 5

KK. The instructor often fails to define new or unfamiliar terms. 1 2 3 4 5

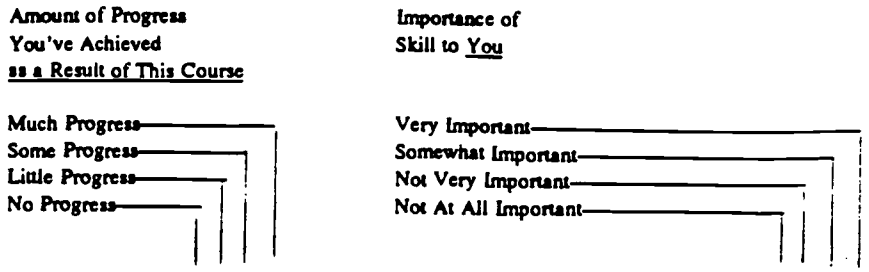
LL. The instructor encourages student comments even when they turn out to be incorrect or or irrelevant. 1 2 3 4 5

10. Please list up to three ways in which you have changed because of this class (e.g. developed new skills, changed world view, are less interested in the subject, behave differently, etc.). (If there have been no changes, say so).

11. Listed below are some statements teachers have used to describe the most important things they do to assist student learning. Please circle the appropriate number in the first column to show the extent to which the instructor of this course did these things, and in column 2, circle the number which shows how helpful you think the action is in helping you learn.

	The instructor did this: (Very Often 5 / Often 4 / Sometimes 3 / Rarely 2 / Never 1)	As a way to help me learn, this is: (Very Helpful 5 / Often Helpful 4 / Somewhat Helpful 3 / Not Helpful 2 / Not At All Helpful 1)
A. Encourages student criticism of instructor's ideas	1 2 3 4 5	1 2 3 4 5
B. Provides extra help sessions	1 2 3 4 5	1 2 3 4 5
C. Encourages students to discuss ideas that go beyond class readings	1 2 3 4 5	1 2 3 4 5
D. Provides structure to clarify the course material	1 2 3 4 5	1 2 3 4 5
E. Finds ways to motivate or interest students	1 2 3 4 5	1 2 3 4 5
F. Shows enthusiasm for the subject	1 2 3 4 5	1 2 3 4 5
G. Relies primarily on classroom discussion as a teaching technique	1 2 3 4 5	1 2 3 4 5
H. Shows personal concern and empathy for students	1 2 3 4 5	1 2 3 4 5
I. Tries to provide a role model for students	1 2 3 4 5	1 2 3 4 5
J. Frequently departs from prepared materials during class to pursue questions or comments from students	1 2 3 4 5	1 2 3 4 5
K. Uses a variety of teaching methods (eg. small group activities, student presentations, etc.).	1 2 3 4 5	1 2 3 4 5

12. Listed below are a variety of academic skills and talents that can be improved or strengthened through particular classes. Please circle the number which best matches (1) the amount of progress you feel you have made in each of these areas as a result of this course, and (2) how important this skill is to you and your goals for college.



	Amount of Progress	Importance
A. Factual knowledge: acquiring new terms, methods, or information	1 2 3 4	1 2 3 4
B. Skills Training: learning specific tasks or professional skills	1 2 3 4	1 2 3 4
C. Principles: learning new theories, generalizations, and ways of organizing information	1 2 3 4	1 2 3 4
D. Application: learning how to use new information, concepts, and methods to solve current problems	1 2 3 4	1 2 3 4
E. Creativity: developing creative capacities -- learning to be more expressive or learning how to approach and solve problems in a new way	1 2 3 4	1 2 3 4
F. Appreciation: gaining greater sensitivity to specific intellectual, scientific, or artistic endeavors	1 2 3 4	1 2 3 4
G. Self-Understanding: acquiring a better sense of myself and/or relationships with others	1 2 3 4	1 2 3 4
H. Self-Management: learning how to plan more effectively for and/or control personal, academic, and/or professional life	1 2 3 4	1 2 3 4
I. Critical Thinking: improving my rational thinking, problem solving, and decision making capacity	1 2 3 4	1 2 3 4
J. Communication: developing skill in expressing myself orally or in writing	1 2 3 4	1 2 3 4

Appendix D
Classroom Observation Protocol

INSTRUCTOR: ___

OBSERVATION DATE.

CONCEPT ARENA AND ITEMS	NUMBER OF TIMES OBSERVED N=Never R=Rarely S=Sometimes O=Often A=Almost Always				
CLARITY: Teaching behaviors that serve to explain or clarify concepts and principles.					
1. Gives several examples of each concept	N	R	(S)	O	A
2. Uses concrete, everyday examples to explain concepts and principles	(N)	R	S	O	A
3. Fails to define new or unfamiliar terms	(N)	R	S	O	A
4. Repeats difficult ideas several times	N	R	(S)	O	A
5. Stresses most important points by pausing, speaking slowly, raising voice, repeating words, etc.	N	R	(S)	O	A
6. Points out practical applications of concepts	(N)	R	S	O	A
7. Answers students' questions thoroughly	N	R	S	O	A
8. Writes key terms on board or overhead.	N	R	S	O	(A)
9. Explains subject matter in familiar, colloquial language	(N)	R	S	O	A
ENTHUSIASM: Use of nonverbal behavior to solicit student attention and interest.					
10. Speaks in a "dramatic" or expressive way	N	R	(S)	O	A
11. Avoids eye contact with students	(N)	R	S	O	A
12. Reads lecture verbatim from prepared notes or text	(N)	R	S	O	A

INTERACTION: Techniques used to foster student participation in class.

13. Encourages students to ask questions or make comments	N	R	(S)	O	A
14. Criticizes students when they make errors	(N)	R	S	O	A
15. Praises students for good ideas	N	R	(S)	O	A
16. Asks questions of individual students	(N)	R	S	O	A
17. Asks questions of class as a whole	N	R	S	(O)	A
18. Incorporates students' ideas and questions into lecture	(N)	R	S	O	A
19. Presents challenging, thought-provoking ideas	N	R	(S)	O	A
20. Uses a variety of media and activities in class	(N)	R	S	O	A

ORGANIZATION: Teaching behaviors that serve to structure or organize the subject matter.

21. Reviews topics covered in previous lecture at beginning of class	(N)	R	S	O	A
22. Gives preliminary overview of lecture at beginning of class	(N)	R	S	O	A
23. Uses headings and subheadings to organize lectures	N	R	S	O	(A)
24. Clearly indicates transition from one topic to the next	N	R	S	(O)	A
25. Explains how each topic fits into the course as a whole	(N)	(R)*	S	O	A
26. Periodically summarizes points previously made	(N)	R	S	O	A
27. Refers to and integrates previous topics into the lecture.	N	R	(S)	O	A

* identifies as compared to explanation

PACING: Rate of presentation of information, efficient use of class time.

28. Dwells excessively on obvious points	(N)	R	S	O	A
29. Digresses from major theme of lecture	(N)	R	S	O	A
30. Asks if students understand before proceeding to next topic	N	R	S	(O)	A
31. Sticks to the point in answering students' questions	N	R	S	O	A

DISCLOSURE: Explicitness concerning course requirements and grading criteria.

32. Advises students as to how to prepare for tests and exams	N	R	S	O	A
33. Tells students exactly what is expected of them on tests, essays,or assignments	N	R	S	O	A
34. States objectives of the lecture	N	R	S	O	A

RAPPORT: Quality of interpersonal relations between teacher and students

35. Addresses individual students by name	N	R	S	O	A
36. Announces availability for consultation outside of class	N	R	S	O	A
37. Offers to help students with problems	N	R	S	O	A
38. Shows tolerance of other points of view	N	R	S	O	A
39. Talks with students before or after class	N	R	S	O	A

COMMENTS/NOTES REGARDING CLASS OBSERVED:

Appendix E
Syllabi Analysis

Syllabus Checklist

Instructor ID # _____ Semester/Year _____
Personal or Departmental Syllabus _____ (P/D)

Course

1. _____ course title and number
2. _____ location of classroom
3. _____ days/hours of meetings
4. _____ pre- or co-requisites

Instructor

5. _____ name of instructor
6. _____ office number
7. _____ office hours
8. _____ office hours: special appointments for counseling, extra help
9. _____ office phone
10. _____ home phone
11. _____ name of teaching assistant(s)
12. _____ address/phone of teaching assistant(s)

Texts and Materials

13. _____ required texts (authors, editions)
14. _____ supplementary or recommended readings
15. _____ other materials (supplies)

Learning Objectives

16. _____ course description
17. _____ course learning objectives

Course Calendar/Schedule

18. _____ daily/weekly schedule of topics
19. _____ daily/weekly schedule of readings and homework
20. _____ topical schedule (no dates specified)
21. _____ major assignments (papers, projects) & due dates clearly indicated
22. _____ required special events noted (visiting speakers, field trips)
23. _____ major exams & dates clearly indicated
24. _____ types of exams (objective or essay; comprehensive)
25. _____ quizzes & dates clearly indicated

Classroom Participation Policies

26. _____ attendance/tardiness
27. _____ anticipated absences (for rescheduling)
28. _____ class participation
29. _____ missed exams/assignments, and opportunities to make up the work
29. _____ extra credit opportunities

Grading

30. _____ grading scheme clearly noted
31. _____ accommodations: curve, dropping lowest grade
32. _____ policy on academic honesty and plagiarism

Availability of Academic Support

33. _____ instructor's tutorials &/or study guides
34. _____ departmental tutorials &/or study guides
35. _____ campus support services

Special Instructions (Discipline-Specific)

36. _____ special attendance requirements, unusual expectations
37. _____ lab requirements
38. _____ special lab reports

Appendix F
Faculty Survey

Partners in Learning: The Faculty Member's Experience

This survey is divided into three parts. In the first part we ask you to respond to questions regarding your focal class in the Partners in Learning Program (i.e. the introductory course you teach that your partner observes).

The questions in the second part were developed based on previous studies of faculty members and are included to give us a sense of how our faculty sample compares to the general faculty population.

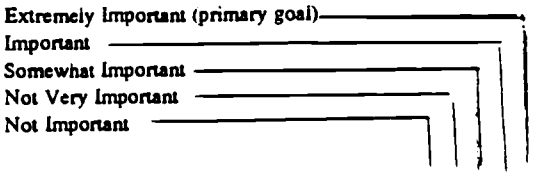
The third part asks questions about your experiences in the PIL Program.

Thank you for your participation.

Instructions: Unless otherwise indicated, please circle the appropriate number for the category you choose.

Part I. These questions focus on your "focal" class for the FIPSE study. Please answer them with that introductory course in mind.

1. Please indicate the extent to which you believe each of the following types of learning is an important goal for this (your focal) course. Use the "extremely important" category only for those skills/learning types that are your primary goals for this course.



a. Factual knowledge: acquiring new terms, methods, or information 1 2 3 4 5

b. Skills Training: learning specific tasks or professional skills 1 2 3 4 5

c. Principles: learning new theories, generalizations, and ways of organizing information 1 2 3 4 5

d. Application: learning how to use new information, concepts, and methods to solve current problems 1 2 3 4 5

e. Creativity: developing creative capacities -- learning to be more expressive or learning how to approach and solve problems in a new way 1 2 3 4 5

f. Appreciation: gaining greater sensitivity to specific intellectual, scientific, or artistic endeavors 1 2 3 4 5

g. Self-Understanding: acquiring a better sense of myself and/or relationships with others 1 2 3 4 5

h. Self-Management: learning how to plan more effectively for and/or control personal, academic, and/or professional life 1 2 3 4 5

i. Critical Thinking: improving rational thinking, problem solving, and decision making capacity 1 2 3 4 5

j. Communication: developing skill in expressing oneself orally or in writing 1 2 3 4 5

2. We are interested in the instructional policies and procedures you use in your focal class. Please use the items and scale below to indicate where on the continuum your instructional policies and procedures for this course would fall. If you use both ends of the continuum equally, indicate this by marking the middle category. Please be sure to mark each scale with an X.

a. Essay tests	___:___:___:___:___:___:___	True-false or multiple choice tests
b. Required Attendance for class	___:___:___:___:___:___:___	Attendance not required
c. Students do projects with several others in the class	___:___:___:___:___:___:___	Students do projects on their own
d. Leaving it up to the students to keep up in the work	___:___:___:___:___:___:___	Regularly checking up on the students to make sure that their work is being done properly and on time
e. An approach that presents a clear point of view	___:___:___:___:___:___:___	An approach that presents different perspectives and leaves it up to the student to develop her/his own point of view
f. My class stresses the student's independence even though assignments may be vague and the student unsure of what's expected of her/him	___:___:___:___:___:___:___	My class stresses clear requirements even though it may restrict the student's independence
g. Lecture classes	___:___:___:___:___:___:___	Discussion classes

3. To what extent do you believe the following teaching activities are (1) Descriptive of your teaching for your focal course, and (2) Important for student motivation. (1 = not at all, 10 = extremely)

	Descriptive of your Teaching in this course	Important for student motivation
a. Stimulate student interest	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
b. Present material enthusiastically	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
c. Meet course objectives	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
d. Be respectful of students	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
e. Motivate students to attain high standards	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
f. Be prepared and organized	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
g. Be intellectually challenging	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
h. Promote communication between instructor and students	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

5. What are two or three things about this course you would like to work on the next time you teach it?

Part II. The questions in this part focus more broadly on you, your preferences, and your views on teaching improvement and student learning.

4. Do your interests lie primarily in teaching or in research?

1. ___Very heavily in research
2. ___In both, but leaning towards research
3. ___In both, but leaning towards teaching
4. ___Very heavily in teaching

5. Faculty members influence students in a number of ways. On the average, how much influence do you believe you have on undergraduate students in each of the following areas? (1 = A Great Deal, 2 = Quite a Bit, 3 = Some, 4 = Very Little, and 5 = Almost None)

	Almost None / Very Little / Some / Quite a Bit / A Great Deal
a. Students' understanding of the methods of inquiry	1 2 3 4 5
b. Their involvement in classroom discussion/activities	1 2 3 4 5
c. Their interest/motivation in introductory courses you teach	1 2 3 4 5
d. Decisions about their major field of study	1 2 3 4 5
e. Shaping their career plans	1 2 3 4 5
f. Their emotional and social development	1 2 3 4 5
g. Their personal philosophy and outlook on life	1 2 3 4 5

6. Please read the statements about teaching techniques below. On the first scale indicate how characteristic the statement is of you, and on the second scale indicate how effective you think the technique is in improving a faculty member's teaching performance. (1 = not at all, 4 = very)

	Characteristic of You: Very Characteristic / Somewhat Characteristic / Not Very Characteristic / Not At All Characteristic	Effective for Improving Performance: Very Effective / Somewhat Effective / Not Very Effective / Not At All Effective
a. Sharing ideas about teaching methods with colleagues	1 2 3 4	1 2 3 4
b. Introducing new teaching methods or procedures	1 2 3 4	1 2 3 4
c. Sharing syllabi with colleagues	1 2 3 4	1 2 3 4
d. Observing each other's classroom	1 2 3 4	1 2 3 4
e. Attending professional development activities to enhance teaching	1 2 3 4	1 2 3 4
f. Incorporating knowledge of different learning styles into one's teaching	1 2 3 4	1 2 3 4
g. Interacting with students outside of class time or office hours	1 2 3 4	1 2 3 4

Part III. Experience with PIL

7a. Think about your focal class. Have you made any adaptations or changes to your teaching of this course as a result of your participation in the FIPSE-PIL project?

___ Yes ___ No (go to Question 8)

7b. If yes, please describe the adaptations or changes you've made and how you feel these changes have affected the overall success of the course. Please be as detailed and specific as possible -- this issue of adaptation is a central element of the study.

8. Please describe any other ways in which you've changed as a result of your participation in PIL (for example -- change regarding your understanding of students, and their learning, change regarding your interaction and relationship with faculty colleagues). If you do not feel that you have changed, please so indicate.

THANK YOU FOR YOUR PARTICIPATION. PLEASE ATTACH ANY ADDITIONAL COMMENTS.

Appendix G
Exit Interview

FIPSE-PIL EXIT INTERVIEWS

1. What is your understanding of the PIL program?

2. Our understanding of the PIL program: teaching becomes more student learning centered, teaching becomes a revitalizing experience: more collegial, creating learning experiences for faculty.

3. Share observation feedback. What do you think about it?

   a. these seven areas of variables -- in which areas do you do things differently? (concrete examples)

   b. to what extent did the partnering focus on these areas?

   c. to what extent did the opportunity to observe another faculty's classroom focus on these areas?

d. to what extent did the student interviews focus on these areas?

4. Partnering Relationships: describe the dynamics of the partnership(s).

a. how did you partner give you feedback?

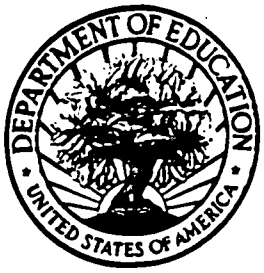
b. what did you do with it (feedback)?

5. Interviews with Students: what kind of feedback/what is the value of feedback from students? What is the most valuable, and what is least valuable?

a. has your view of students changed over the last three years?

b. what is the value of interviewing students?

6. PIL program: would you join a PIL program again knowing what you know now?



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