The extent to which faculties at public and private two-year college are in a state of readiness for professional innovation is explored. A case study of faculty attitudes toward innovation for the faculties of Harcum Junior College and Harrisburg Area Community College was evaluated. A set of 12 items were developed which included 5 areas of concern to two-year college educators. Individuals were asked to respond to each item by checking among the following the one of five responses which best represented their opinions: 1 = strongly agree; 2 = mildly agree; 3 = neutral; 4 = mildly disagree; 5 = strongly disagree. For the first 10 items in the questionnaire, responses could be viewed as a continuum ranging from "Acceptance of innovation" to "Orientation to traditionalism". The last two questionnaire items provided information about faculty feelings toward their backgrounds for and college support for instructional research. Results of answers include: (1) The highest vote for traditionalism was offered by Harcum in connection with student dress; the lowest, also recorded by Harcum was in connection with student dissent; for in this latter category Harcum opted for the highest "innovation" vote. (Author)
Two-Year College Faculty Attitudes: Innovation Readiness
(A parallel-perceptions inquiry)

IRR 72-38
Relevant Research/Relevant Education
Partners in People Progress

Boris Blai, Jr., Director
Office of Research

Prepared by
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Harcum Junior College
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UNIVERSITY OF CALIF.
LOS ANGELES
DEC 27 1972
CLEARINGHOUSE FOR JUNIOR COLLEGE INFORMATION
Two-Year College Faculty Attitudes: Innovation Readiness  
(A Parallel-perceptions Inquiry)*

To what extent are faculties at a public and private two-year college in a state of readiness for professional innovation? This deceptively simple question is not necessarily simply answered. With vigorous focus upon accountability and faculty evaluation, one might anticipate a faculty being defensive about their feelings, in this area of professional competence. They might, for example, vent their disaffection by not responding to an anonymous questionnaire.

The generally cooperative attitude of Harcum's faculty in the Fall of 1972 is evidenced by the 'high' level of response: 84% of those circularized (N = 43) responded fully to the 12-item questionnaire. This compares favorably with the extent of participation in the Fall of 1970 of the Harrisburg Area Community College faculty (97% - a brief endorsement statement from the president of the College accompanied the questionnaire.)

As was noted in the Harrisburg study; "Relatively little attention has been directed toward empirical evaluation of faculty attitudes about specific issues which face the two-year college faculty attitudes about specific issues which face the two-year college. This (parallel-perceptions) study represents an attempt to bridge this gap by examining faculty attitudes toward innovation within a two-year college." Additionally, this study seeks to ascertain contrasts and similarities among two faculties in two Pennsylvania Community/Junior Colleges: one public, tax-supported, community-oriented and controlled; the other a private, independent junior college whose control is vested in a board of trustees who determine all general policies, academic and administrative, and relate the institution to society.

For a number of reasons, a case study of the faculties at Harcum Junior College and Harrisburg Area Community College appear appropriate for an evaluation, within two-year colleges, of faculty attitudes toward innovation. Harcum Junior College was the first two-year college in Pennsylvania granted authority to award the A.A. and A.S., degrees. Harrisburg Area Community College is the oldest public community college in Pennsylvania. Both institutions are fully accredited by the Middle States accrediting agency and enjoy reputations as mature, quality two-year colleges. The faculties and programs at both schools represent several diverse areas usually associated with 'comprehensive' two year colleges. Administrators of both colleges have supported a number of new approaches to improving the quality of the Colleges' programs.

*The 12 items of inquiry in this questionnaire survey are used with the permission of, and are drawn from, Research Report No. 9 - Faculty Readiness for Innovation: A Case Study, by Dr. Clyde E. Blocker, Dr. Fred A. Snyder; Malcolm D. Hill (Harrisburg Area Community College) 1971.
Quoting from the Harrisburg study... "The reliability of the questionnaire (utilized) was not fully established, but intercorrelations of responses to the 12 statements of the attitude scale were low, showing general independence among the statements; most intercorrelations were under 0.30, and just one was as high as 0.40". "The research instrument has not been used elsewhere, so there is no existing norm against which to compare the findings." Replication of the study is needed to determine if the research instrument would produce comparable results at other institutions."

Herewith then is one such replication.

Faculty Attitudes (Summary of findings)

Seeking to ascertain the extent of faculty readiness for professional innovation, a set of 12 items were developed which included 5 areas of concern to two-year college educators. Individuals were asked to respond to each item by checking from among the following the one of five responses which best represented their opinions: 1 = strongly agree; 2 = mildly agree; 3 = neutral; 4 = mildly disagree; 5 = strongly disagree. For the first 10 items in the questionnaire, responses could be viewed as a continuum ranging from "Acceptance of innovation" to "Orientation to traditionalism". The last two questionnaire items provided information about faculty feelings toward their backgrounds for and college support for instructional research.

Items in the questionnaire, grouped by categories, included:

Student Behavior and Role
Item 1 - "All things considered, student dissent on college campuses has served a constructive function for both students and faculty."

<table>
<thead>
<tr>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Orientation to Traditionalism</td>
</tr>
<tr>
<td>66%</td>
<td>Harrisburg</td>
</tr>
<tr>
<td>80%</td>
<td>22%</td>
</tr>
<tr>
<td>5%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Percent of Responses*

* The percentages result from the total number of responses from the two categories at the appropriate end of the five-point scale being divided by the total number of responses from all five categories. (For example, the Harrisburg 66% "agree" consisted of the total number of 1 and 2 responses - "strongly agree" and "mildly agree" being divided by the total number of responses from all five categories. Similarly, the Harrisburg 22% consisted of the total number of 3 and 4 responses divided by the grand total of responses).

Item 2 - "The only limitations on student dress should be those specifically related to matters of hygiene and safety."

<table>
<thead>
<tr>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Orientation to Traditionalism</td>
</tr>
<tr>
<td>70%</td>
<td>Harrisburg</td>
</tr>
<tr>
<td>54%</td>
<td>22%</td>
</tr>
<tr>
<td>40%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Percent of Responses
Item 3 - "Students should be encouraged to participate on virtually all college committees."

<table>
<thead>
<tr>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree 68%</td>
<td>Harrisburg 21% = Disagree</td>
</tr>
<tr>
<td>71%</td>
<td>Marcum 25%</td>
</tr>
</tbody>
</table>

As delimited in the dimensions probed by this questionnaire, to what extent do these faculties accept changes in student behavior and role?

Scanning the above 3 tabulations, with one exception, (Harcum 54%), at least 66% or more (two-thirds or more) of the respondents favored "innovation" versus "traditionalism." As the Harrisburg study notes, "While no abstract definition of this dimension is offered,... to be innovative the faculty must show an acceptance or preference for certain conditions or programs at the two-year college, which for the most part are markedly different from those at colleges such as the faculty attended (usually a decade or more ago). ...For each statement, "Acceptance of innovation" was reflected from the respondents' preferences for those conditions or practices which have been gaining ascendancy only recently in higher education."

"For example, it was considered 'innovative' for a respondent to agree that student dissent has been constructive, students should serve on college committees, the college should attempt to attract and support disadvantaged students, non-degree programs should be expanded, and that the instructors' role should include instructional research and development. It was considered 'traditional' for a respondent to disagree with the foregoing points and for him to agree that past grading practices have been the best evaluative method available, and that administrators are in the best position to decide about college policy."

Within the above-described framework, these two faculties (66%+) generally revealed tolerant liberal perceptions of the role and behavior of the collegiate student. However, are the "innovative" perceptions differences between the two faculties statistically significant ones, or might they merely reflect chance or sampling fluctuations?

To determine if the obtained differences between the means of two groups is likely to be a chance or true one, the t-ratio formula may be utilized in which $t = \frac{D}{SE_D}$; where $t = t$-ratio; $D$ = the obtained difference between the means of the two faculties; $SE_D$ = the standard error of the means of the two groups.

A t-ratio of 3 is virtual certainty (99.9 chances out of 100) that a true difference in means exists in the two populations which these two samples represent. One larger than 3 is that much more assurance of a true difference.
The t-ratios for the three items included under the Student Behavior and Role rubric are:

1. \( t = 4.0 \)
2. \( t = 3.4 \)
3. \( t = 1.7 \)

Therefore, these results for the first two items may be termed as extremely reliable data, for with a \( p = .001 \), the confidence or probability level that these differences may be considered real ones is extremely high.

With a t-ratio of 1.7 for the third item, since a t-ratio of only 1.6 is near certainty (95 chances out of 100: i.e., the so-called 5% level of confidence), this data too may be considered as reliable evidence that the difference noted between the two groups is a real one.

From the perceptions recorded for the faculties from these two earliest degree-granting private and public junior colleges in Pennsylvania, it is concluded that in matters of student dress the public sector group with a co-ed student body is more "innovative" than the private sector group (with an all-female student body). In matters of student participation on college committees and student dissent on campus, however; the 'edge' in innovative views is held by the Harcum faculty.

In summary - the highest 'vote' for traditionalism was offered by Harcum (40%) in connection with student dress; the lowest, also recorded by Harcum (7%) was in connection with student dissent; for in this latter category Harcum opted for the highest "innovation" vote (80%). Harcum also 'anchored' the lowest 'vote' cast for innovation (54%) in regard to student dress. Therefore, in this area of Student Behavior and Role, Harcum's faculty reflected the greatest variations in traditionalism/innovation perceptions; in contrast with the Harrisburg group who clustered between 66% - 71% for innovation; both groups being quite substantially (66%+) innovation-oriented.

Administration and Policy

Item 4 - "All things being equal, college administrators are in the best possible position to make decisions about college policy."

<table>
<thead>
<tr>
<th>Percent of Response</th>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree =</td>
<td>42%</td>
<td>Harriscburg</td>
</tr>
<tr>
<td></td>
<td>43%</td>
<td>Harcum</td>
</tr>
</tbody>
</table>

Item 5 - "The present method of evaluating student performance through letter or numerical grades is probably the best one currently available."

<table>
<thead>
<tr>
<th>Percent of Response</th>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree =</td>
<td>29%</td>
<td>Harriscburg</td>
</tr>
<tr>
<td></td>
<td>40%</td>
<td>Harcum</td>
</tr>
</tbody>
</table>

5
In this area of assessing the extent of faculty acceptance of traditional authority and practice as against a desire to depart from traditional modes, innovative tendencies are reflected in departures from the expressed traditional views of items 4 and 5.

Although the Harrisburg faculty were evenly-divided in feeling that administrators are in the best possible position to make decisions about college policy, a majority (54%) of the Harcum group were oriented to traditionalism in this specific area of administration. In the area of grading, both groups evidenced a higher proportion traditionally-oriented rather than innovation-minded, a majority of both groups opting for traditional grading practices.

In comparing the innovation-index in the Administration & Policy area for both groups, combined, with that of the Student Behavior & Role area, it is clearly apparent that only an average of 44% are innovation-oriented in the former area, compared to an average of 68% in the latter area. Therefore, "conservatism" reflects the majority-sentiment of these groups in matters of administration and policy, whereas "innovation" is more representative of these groups in matters relating to student role and behavior.

The t-ratios for the two Administration and Policy items are:

4. \( t = 1.1 \)
5. \( t = 3.1 \)

It is therefore concluded, with a high degree of confidence, that the innovation difference noted in item 5 is a 'real' one; whereas, with a probability level of far less than .05, (only 86 chances out of 100 that the noted difference could be 'real'), in the area of decision-making, the difference noted is not considered 'significant'.

Educational Programs and Services
Item 6 - "With respect to special services for disadvantaged students, the administration should seek out such students within the community, even if money and programs must be specially sought to meet the need."

<table>
<thead>
<tr>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree = 79% Harrisburg</td>
<td>9%   = Disagree</td>
</tr>
<tr>
<td>70% Harcum</td>
<td>6%</td>
</tr>
</tbody>
</table>

Item 7 - "The college should provide community leadership in such areas of social change as civil rights, housing, equal employment, and social services."

<table>
<thead>
<tr>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree = 68% Harrisburg</td>
<td>18%   = Disagree</td>
</tr>
<tr>
<td>57% Harcum</td>
<td>9%</td>
</tr>
</tbody>
</table>

Item 8 - "Non-degree programs in continuing education should be expanded to meet the desires of the community."

<table>
<thead>
<tr>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree = 98% Harrisburg</td>
<td>1%   = Disagree</td>
</tr>
<tr>
<td>89% Harcum</td>
<td>67%</td>
</tr>
</tbody>
</table>
Item 9 - "The goals of education for community college students should focus primarily upon preparation for employment and American cultures and traditions."

<table>
<thead>
<tr>
<th>Percent of Response</th>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree =</td>
<td>23% (Harrisburg)</td>
<td>65% (Harcum)</td>
</tr>
<tr>
<td>50% (Harcum)</td>
<td></td>
<td>32% (Harrisburg)</td>
</tr>
</tbody>
</table>

T-ratios for these items were: item 6 = 2.6; item 7 = 2.4; item 8 = 2.5; and item 9 = 4.9; all well within the .05 level of confidence. Therefore these differences may be regarded as being statistically significant.

Bearing in mind that the responses to this substantive area of educational programs and services offered are those of a private, non-tax-supported junior college faculty, as well as a wholly tax-supported community college faculty, it is particularly noteworthy to view their contrasts and similarities. Throughout, responses which favored expansion of these programs and services were viewed as indications of innovative inclinations.

Both faculties overwhelmingly agreed that their administrations should seek out disadvantaged students; with less than one-tenth of either group voicing disagreement.

Less unanimity of views applied in the area of the college providing community leadership in such areas of social change as civil rights, housing, equal employment, and social services. However, a majority of both groups did express approval, revealing two moderately liberal faculties having a 'social service' commitment sense.

Expanding continuing education opportunities represents, for both faculties, the 'strongest' innovation response. Both faculties are virtually one mind in feeling that non-degree programs in continuing education should be expanded.

And finally, as the Harrisburg report indicated, with reference to educational goals for community college students—— "The purpose of this statement was to assess faculty opinion about whether a community college education should be directed toward preparation for employment and cultural assimilation, while essentially ignoring humanistic and self-fulfillment goals." Sharp contrasts are noted, with two-thirds of the Harrisburg faculty agreeing with statement, whereas only one-third of the Harcum faculty was so disposed. In this area alone, a very major difference in innovation percentages is noted.

Item 10 - "The role of the instructor at the junior (community) college should include research and development about the techniques and outcomes of teaching."

<table>
<thead>
<tr>
<th>Percent of Response</th>
<th>Acceptance of Innovation</th>
<th>Orientation to Traditionalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree =</td>
<td>79% (Harrisburg)</td>
<td>9% (Harcum)</td>
</tr>
<tr>
<td>50% (Harcum)</td>
<td></td>
<td>25% (Harrisburg)</td>
</tr>
</tbody>
</table>

-6-
Some four-fifths of the Harrisburg faculty expressed acceptance of the role of an instructor (at a community college) to include research and development, which reveals acceptance of an instructional role that goes beyond the traditional activities. Only half of the Harcum group agree that this should be the role of the instructor (at a junior college).

**Instructional Research**

The last two statements in this survey related to college support for and personal preparation for instructional research, revealing an additional dimension relating to degree of faculty readiness for innovation. Responses to the two statements about support for instructional research were not rated on the innovative versus traditional dimension; rather, they were considered as either favorable or unfavorable conditions for instructional research.

Item 11 - "There is adequate professional support (released time, professional consultation, etc.) for instructional research at HJC."

<table>
<thead>
<tr>
<th>Percent of Response</th>
<th>Support for Instructional Research</th>
<th>Non-Support for Instructional Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agree</strong></td>
<td>30% Harrisburg 7% Harcum</td>
<td><strong>28%</strong> Harcum 71%</td>
</tr>
</tbody>
</table>

Sizable contrasts are evident in the responses of these two faculties. Whereas about equally-divided percentages are noted for the Harrisburg faculty, there is a sharp divergence from them and within the Harcum group. Although only about one-fifth of the Harcum group gave a neutral response, twice that amount (40%) did so for Harrisburg. Among the Harrisburg group, about one-third agreed that their college gave adequate professional support for instructional research. Among the Harcum sample less than one tenth agreed, with a very large seven tenths disagreeing.

Item 12 - "Nothing in my past education prepares me for instructional research as noted in items 10 and 11 above."

<table>
<thead>
<tr>
<th>Percent of Response</th>
<th>Support for Instructional Research</th>
<th>Non-Support for Instructional Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disagree</strong></td>
<td>53% Harrisburg 57% Harcum</td>
<td><strong>27%</strong> Harrisburg 25%</td>
</tr>
</tbody>
</table>

Only about one-quarter of both faculties agreed that nothing in their past experience prepared them for instructional research, with somewhat more than one-half of both groups disagreeing, to indicate that their past experience did include some preparation. These, of course, are expressions of confidence in one's preparation, and should not be necessarily equated with quality of preparation.

t-ratios for these two items were: #11 = 6.3 and #12 = 1.8; both differences being statistically significant beyond the .05 level of confidence.

Therefore, circa 1970 for Harrisburg and 1972 for Harcum, these faculties, overall, did not agree that there was adequate professional support - released time, professional consultations, etc. - for instructional research.
As might reasonably have been hypothesized, attitudes are more supportive of innovation in some areas than in others. Table 1, below, summarizes the innovative indexes for these two faculties, as reflected in the average percentages for each of the areas, determined by combining and averaging the percentages for innovation of the various items included under each rubric.

Table 1: Faculty Innovation - indexes, Harrisburg Community and Harcum Junior Colleges

<table>
<thead>
<tr>
<th>Area</th>
<th>Harrisburg</th>
<th>Harcum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Behavior and Role</td>
<td>68%</td>
<td>68%</td>
</tr>
<tr>
<td>Administration and Policy</td>
<td>36%</td>
<td>42%</td>
</tr>
<tr>
<td>Educational Programs and Services</td>
<td>69%</td>
<td>63%</td>
</tr>
<tr>
<td>Totals</td>
<td>173</td>
<td>173</td>
</tr>
</tbody>
</table>

Scanning Table 1, the high degree of similarity in overall views between these two faculties is strikingly apparent. Therefore the comments contained in the Harrisburg report are equally appropriate to the findings of this parallel perceptions inquiry.

"Generally, the faculty revealed tolerant or liberal views about student behavior and role. Regarding administration and policy they were more conservative. Under half disagreed that college administrators are in the best position to decide on college policy, and even fewer disagreed that the present grading system (letter or numerical grades) is probably the best available.

"Their views about educational programs and services appeared mixed, but faculty were generally supportive of change. They were nearly unanimous in support of expanding continuing education programs, and they gave heavy support to providing special services for disadvantaged students and to providing community leadership for civil rights and social action. The majority accepted a 'conservative' statement about educational goals, but the statement was admittedly vague and open to interpretation."

One final listing reveals the priorities of importance which the Harcum and Harrisburg faculties attach to this 10 elements of college policies and practices. This is itemized below, in rank-ordering of Harcum faculty acceptance of innovative response in the area: Harrisburg percentages in parentheses).

1. Non-degree programs in continuing education should be expanded to meet the desires of the community-----------------------------------------------89% (98%)
2. All things considered, student dissent on college campus has served a constructive function for both students and faculty--------------------------------80% (66%)
3. Students should be encouraged to participate on virtually all college committees--------------------------------------------------------71% (68%)
4. With respect to special services for disadvantaged students, the administration should seek out students within the community, even if money and programs must be specifically sought to meet the need------------------------------------------70% (79%)
5. The College should provide community leadership in such areas of social change as civil rights, housing, equal employment, and social services----------------------57% (68%)
6. The only limitations on student dress should be those specifically related to matters of hygiene and safety----------------------------------------------54% (70%)

7. The role of the instructor at the junior college should include research and
development about the techniques of outcomes of teaching----50% (79\%)
8. The goals of education for junior college students should focus primarily upon
preparation for employment and American cultures and traditions------50% (23\%)
9. All things being equal, college administrators are in the best possible position
to make decisions about college policy-------------------------43\% (42\%)
10. The present method of evaluating student performance through letter or numerical
grades is probably the best one currently available-----------------40\% (29\%)

To conclude this parallel perceptions inquiry, several recommendations for
enhancing faculty readiness for innovation are drawn from the Harrisburg report, as they
appear equally germane to a private junior college faculty. Although Blocker (1965) has noted
that the ideal faculty should include departmental specialists, generalists, and student-
centered teachers, ..."it is hoped that most staff members would have some awareness of
new approaches to educational practices, and some ability and desire to introduce them into
their instructional and related activities. ...The recommendations which follow are
intended to enhance the development of more appropriate norms of beliefs and professional
roles by faculty at two-year colleges.

1. **Presidential leadership.** A first prerequisite for developing an innovative faculty is a
desire by the President to improve the quality of instruction at the community
(junior) college, and an awareness of some approaches to improving it. The
President, more than any other individual, sets the tone of the college through
selection of deans, building an organization structure, building the budget,
setting personnel policy, and his performance of many other functions.

2. **Selection of new personnel.** Next to appointment of the President, the selection of
properly-qualified personnel for the college staff is most crucial to developing
an innovative faculty.

3. **Faculty orientation programs.** New staff members must be given an appropriate
orientation to the college and its purposes. Kelly and Connolly (1970) have
specified in considerable detail a rationale and model for an orientation program
for new faculty.

4. **Continued professional development.** Equally important as the orientation of new
faculty is a program of continued professional development for all faculty
members. New ideas about higher education, new developments in teaching
and counseling, changes in the student body, changes in college objectives, and
the desire for continued personal development by individual staff members all
support the need for a well-planned program of staff development.........
While the two-year college must continue (for the present) to depend upon universities and research centers for significant basic research and development, it must maintain its ability to apply research findings in a manner which is consistent with developing its unique educational mission.

Boris Blai, Jr. Ed.D.
Director, Institutional Research
November 1972

References

Hill, M.C., Snyder, F.A., Blocker, C.E. Faculty Readiness For Innovation: A Case Study. Research Report No. 9, Harrisburg Area Community College. 1971