This paper represents a brief version of a report to be published later this year and summarizes the "Institutions in Transition" project. Part I involved an extensive review of US Office of Education data from 1940 to the present. Major findings were that (1) the rapid increase in the number of students in higher education has been primarily accommodated by steadily expanding public institutions; (2) state institutions have moved more rapidly than other types offering the PhD degree; (3) American education is becoming overwhelmingly coeducational; and (4) between 1949 and 1966, 898 new institutions were created. Part II dealt with the results of a questionnaire to which 1230 institutions responded. Questions were asked about the institution's openness to students from different ethnic and socioeconomic backgrounds, institutional "effectiveness", student participation in decision making, school spirit, faculty attitude towards innovation, faculty autonomy, cooperative and interinstitutional programs, and important changes that had occurred on the campus. In terms of the changes reported, there was little difference between public and private institutions. Large institutions were subjected to more pressure for change than smaller ones. (AF)
This paper represents a very brief advance version of a report to be published by the Carnegie Commission and McGraw-Hill later this year, which will summarize the Institutions in Transition project. This major study of change in American higher education was done in three phases: The first is an extensive review of U.S. Office data dealing with higher education on a yearly basis from 1949 to the present. The second phase concerns a questionnaire analysis received from 1,230 institutions of higher education across the country, administered during the last academic year. The third phase of the project consists of five case studies dealing with institutions which have gone through change patterns which we discern to be characteristic of the future. Today, however, I would like to deal only with the first and second sections of the research and only in a very brief way.

In dealing with the census data from the U.S. Office of Education directories taken for each year, some conclusions are clear and obvious. It is very clear that the rapid increase in number of students attending higher education has been accommodated primarily by the public institutions and not by the private ones. It is also clear that this accommodation was made not by creating new institutions, but by rapidly expanding institutions that already existed. From 1947 to 1966, the number of public institutions increased less than 300, while the number of students attending each public institution went from 2000 students to an average of almost 5000. At the same time, in the private sector, 300 institutions were added from 1947 to 1966, but the number of students per institution went only from 1039 to 1374. Thus it is clear that the public institutions have taken the brunt of the student population explosion and have done it through expansion rather than building new campuses.

The second major finding is that institutions of state control have moved rapidly toward the acquisition of the PhD degree as the highest degree awarded, much more so than any other level of control. In 1949 only 52 of the 149 PhD granting institutions in the country were state controlled. By 1966 107 of 228 PhD degree granting institutions were state controlled. At the Masters level as well, state controlled institutions have shown a net gain of 80 in that category over the period, while at the BA level state institutions have lost 70 institutions.

The largest gain in institutional type occurred in the institutions awarding less than the BA degree, and here the number of new institutions were overwhelmingly of local control (showing a net gain for the period from 1949 to '66 of 145 new institutions offering less than a BA locally controlled). These are clearly the community colleges, and it remains to be seen whether they will seek higher degrees in the future as have other institutional types in the past.


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Compared to these rather dynamic moves in the public sector, private institutions have changed relatively little in terms of highest degree awarded, although the Catholic institutions have added far more in all degree categories than any of the other private categories.

American education is becoming overwhelmingly coeducational. In the same period, 1949 to 66, there was a net gain of four men's institutions, 18 women's institutions, and 414 coeducational institutions, as almost all institutions added during the period of 1949 to 66, and a great many others as well, have gone coeducational. It also is clear that many institutions have moved to the acquisition of a higher degree without first increasing the student body population, library holdings, or qualified faculty, to make the new degree a strong one. The assumption seems to be in some institutions that the acquisition of the higher degree will pull new funds, new faculty, and qualified talented students. At the moment that assumption is still in doubt.

During the period from 1949 to 66, 898 new institutions emerged on the scene. Of these 510 offered less than the BA degree, 272 offered the Bachelor's, 72 the Master's, 14 the Doctorate, and 13 other highest degrees. During that same period 366 institutions went out of business or merged. Of these 165 were less than BA, 118 offered the Bachelor's, 49 the Master's, 12 the PhD, and 22 other. 188 of these had liberal arts and general curricula, 24 had teacher preparatory programs, 123 had professional and technical programs. It is quite clear, then, that during this period the chance of survival was much better if one offered a higher degree than if one did not.

There is clearly a functioning status system within higher education that ensures success to those institutions which offer advanced degrees. Our data supports those who argue that a monolithic status system exists in American higher education and pervades virtually all colleges and universities; that there is one central pattern based on specialization of interest and competence in the discipline; that students and faculty are rewarded as they attain higher levels of specialization, etc. Our migration data supports this thesis in terms of the upward direction of institutional migration. It also calls into some question the faith we have in the pluralistic nature of American higher education.

Let us now look briefly at the questionnaire results in terms of the internal dimensions of institutional life.

In dealing with the student body changes, we have set up a number of descriptors which enable us to classify change data. First is the openness of institutions of higher education to different types of students. By far the greatest change occurred in the openness of institutions to students of different ethnic backgrounds, followed by the proportion of married students and the proportion of transfer students.

It is interesting to observe that higher education is much more open to members of different races than it is to members of different social classes. It is clear that colleges and universities have increased their proportional enrollment of students from ethnic minorities by giving a preference to the better educated middle class minority student. It is yet to be seen what the impact of "open admissions" policies will be in terms of whether institutions can actually attract and hold lower class students regardless of their race. That, perhaps, will be one of the big issues of higher education in the 1970s.
We were also concerned about the effectiveness of the institutions in terms of their ability to get students through degree programs. Here the findings are quite conclusive on two dimensions: the proportion of graduating class planning on continued education is very much higher than it was, and the proportion of freshmen completing their degree requirements has shown a marked increase.

We were also interested in what could be called modernity of the student body: the degree to which students actually take a part in decision making affecting their future. It is quite clear that in a majority of institutions in our study, student participation in a wide variety of policy formation activities has increased. It is clear that if one postulates another trend, as opposed to the modernity trend, to be called traditional—very small numbers of institutions have reported increases in school spirit, in number of men joining fraternities and number of women joining sororities. Thus on the basis of this data, the institutions have moved far more toward the modernity pole and away from the traditionalist pole. Note that these trends do not just involve the major public universities in our sample but are characteristic across the sample.

Let us look now at some faculty characteristics from the study, first of all matters dealing with faculty mobility. 42 percent of our institutions report an increase in the proportion of tenured faculty and 23 percent report that tenure is being given at an earlier and earlier age. Yet faculty turnover is increasing in only 4 percent of the small institutions reporting, and in 14% of those over 25,000 students. This suggests that institutions are building reward systems designed to get faculty through the rites of passage as quickly as possible and doing everything they can to make them stay at that institution, with small colleges doing the best job at retention.

Our next area answers the question: How well are institutions succeeding at building faculty commitments? The answers are not entirely encouraging. It is clear that in many institutions faculty are more committed toward research and are spending more hours on research, with a slightly smaller increase in commitment toward teaching and a drastic reduction in commitment toward the institution itself. Again these are not university trends but exist, to some extent, across the sample.

We were surprised to find on a measure of faculty modernity that faculty seem to be more open to new approaches, both to teaching and to making productive encounters with students, than was our original assumption, although it is clear that when the faculty's own status is threatened, their willingness to accept student course evaluations is much lower than their willingness to experiment with their own teaching methods. Faculty support of students who oppose the administration shows an increase in 29 percent of the institutions, a fairly sizable percentage.

With regard to faculty autonomy, it seems that faculty involvement in determining institutionwide policies has shown an increase in three-quarters of our institutions, while the proportion of faculty publicly advocating positions with regard to national policies is up in 41 percent. It does not appear from this data that external pressures limiting faculty freedom is much of a problem on the campuses in our sample. With regard to the administration it is clear that a large number of institutions have established working relationships with other colleges and universities. Over three-quarters of the sample now have a reported increase in these relationships. Almost half of the sample reports an increase in the number of cooperative programs with local industry. Finally, we asked the presidents who responded to our questionnaire to rank all the changes that they
described in the questionnaire in terms of the importance of their impact on the institution. Almost 30 percent of the presidents felt that changes in internal authority had the greatest impact, 126 of these felt that increases in faculty authority was most important, while 100—surprisingly enough—said that increases in student authority were the major factor. 16 percent of the respondents felt that changes in academic programs was the most important single change. Updating curriculum was mentioned by about half of those responding to this item, while special programs were reported by 13. However, it must be said, that of those who reported special programs only one indicated that this was a program specifically designed to work with some ethnic minority group. The third most important change was mentioned by about 11 percent of our respondents, which concerned changes in the composition of the student body, including diversity of background and quality of admission. From there the changes taper off rather sharply to institutional growth, recruitment of staff and students, calendar changes and, interesting enough, changes in the faculty which apparently is not a major source of change which has a major impact on the institution.

One of the major purposes of the study was to find out whether different kinds of institutions of higher education had changed in different directions, or whether all institutions were moving the same way, at different rates. We were able to break down the data along a number of dimensions, such as control (public, private-sectarian, private non-sectarian), size (5 categories from less than 1,000 students to over 25,000) geographical area (eight regions of the US), highest degree offered, single and multi-purpose, and by a number of changes we thought might be significant, such as moving from private to public control, from small enrollment to large, from a lower degree to the PhD, from 2 year to 4 year programs, etc.

To summarize 140 computer printouts in three paragraphs, we found that in terms of the changes reported, there was little difference between public institutions and the two private categories. (This is not to say that public and private higher education is identical, but that they are changing in the same directions). This means that they will be more alike in the future than they have been, and casts some doubt on our faith in diverse and pluralistic systems of higher education. On our total list of 53 change measures there are only a few that show differences by control. Public institutions have not moved toward admitting more out-of-state students as often as private ones. Increased student protest (made into a special study to be published in the Teachers College Record) was remarkably similar, although a smaller percentage of sectarian institutions reported increased protest than did either public or non-sectarian. School spirit was up in the public institutional averages, while the trend in non-sectarian institutions was decreased school spirit. Similarly, faculty commitment to the institution (adult school spirit) was down the most at the non-sectarian institutions. They seem to have a morale problem about which we have clues, but time does not permit digression here.

We were amazed to find that region of the country had almost no impact on the directions of institutional change. (For example, student protest has occurred very evenly across the country, with the midwest and far west at the top in reporting increased protest at 35% and 34% respectively, while the lowest areas were the southwest, southeast, and rocky mountains, running between 16 and 21%.) Even the "activism" measures for students and faculty showed high similarity in the change rates across the country, with the one exception of underground publications and films, which are much lower in the rocky mountains and the southeast than in other parts of the country. Perhaps it's the air.

The one dimension that does seem to turn up differences in change patterns more
than any other is institutional size. For better or worse, large institutions have been subjected to more pressures for change than have smaller ones. It is the large institutions in which hours spent in teaching have declined sharply, and hours spent in research have increased just as sharply. Commitment toward teaching has increased in 29% of the small institutions and declined in 19% of the "giant" institutions. Faculty commitment to the institution is up in 15% of the small institutions, down in 52% of the giant ones of 20,000 and more students. And perhaps most interesting, 12% of the small institutions report an increase in student protests and demonstrations, while 89% of the over 25,000 student institutions reported increased student protest. In the piece on student protest I have developed some hypotheses on the impact of size on protest. For our purposes here, it might be enough to point out that the exact size of an institution may not be as important as its rate of growth. As one looks at the data from institutions that have gone from medium size (1,000-5,000) to giant (15-25,000) during the decade, it is clear that they have had enormous morale problems. Students and faculty have gotten lost in the shuffle. Some researchers have looked for a "critical mass," a size over which the lid blows off the institution. Our data does not turn up any such size, indicating that rate of growth may be more interesting as a critical factor.

The highest degree awarded by an institution also affects its change rates, but basically in the same direction as the size of institution. In fact, within a category of highest degree, one can find differences by size -- for example, the mean size of the PHD awarding institutions that reported increased protests from students was 15,000, while the mean size of PHD institutions reporting no change in protest was only 5,000).

This then gives us a rough idea of where we have been. The next question is: Where are we going? From this data it appears that many institutions have reconstituted their government structure to include a wider variety of participants, just as they have expanded the heterogeneity of the student body. Faculty are increasingly tenured and perhaps with the security that comes from tenure are stating their positions on a variety of issues more frequently than in the past.

These two forces seem to be on a collision course. Faculty often measure quality by the number of student rejected, either at admissions or in a course. Others have argued that the criteria for rejection have been arbitrary, non-functional, and prejudiced. Whether an institution can be concerned with both quality and equality may be the issue that will produce change in the seventies.