An experimental calendar was adopted at Harcum Junior College (Pennsylvania) for 1969-70. Under this plan, the first semester ended before Christmas; a 4-week recess followed. The length of class periods was extended from 50 to 60 minutes. A poll of student, faculty, and administrative opinion showed that a majority favored the new calendar. Faculty and student comments were summarized. (MS)
THE EXPERIMENTAL SCHOOL CALENDAR

1. The school year 1969-1970 was scheduled using a new academic year calendar system, which provides four weeks mid-year recess between Christmas and the beginning of the second semester. Also, to assure students equal benefits of the previous longer semester which has been curtailed in this new arrangement, the length of class periods was increased from 50 to 60 minutes.

2. Among the views suggesting the desirability of this change are:
   (1) Elimination of the "lame duck" session after Christmas.
   (2) A natural break-off point.
   (3) Concluding the first semester at Christmas might well elicit a higher crescendo and stimulate a higher level of motivation in student study habits.
   (4) The considerable economic factor of eliminating the expense of an additional round trip fare between college and home, since many of the students (approximately 70%) are residents living outside of the normal commuting area of the college.

3. Since this new calendar plan has been regarded as experimental for this first year, the views of those directly concerned with the school calendar were obtained through an anonymous questionnaire circulated to the students, faculty and administrative personnel in December 1969. The results are summarized in the following tabulation and comments; all figures being rounded off to the nearest whole number.

Table 1. Student Faculty Administration School Calendar Views

<table>
<thead>
<tr>
<th>Questionnaire Item (below)</th>
<th>Too Long</th>
<th>About Right</th>
<th>Too Short</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Recess is:</td>
<td>15%</td>
<td>80%</td>
<td>5%</td>
</tr>
<tr>
<td>Present Length of Class Periods is:</td>
<td>49%</td>
<td>49%</td>
<td>2%</td>
</tr>
<tr>
<td>Recommend Next Year Recess be:</td>
<td>Longer</td>
<td>Same</td>
<td>Shorter</td>
</tr>
<tr>
<td></td>
<td>12%</td>
<td>75%</td>
<td>13%</td>
</tr>
</tbody>
</table>

A = Students (N=280) 47% of total
B = Faculty-Admin. (N=15) 30% of total
4. (a) As Table 1 clearly reveals, a preponderant majority of both students (80%) and faculty-administration respondents (80%) consider the present inter-session absence "About Right"; with no more than 1/5th of either group considering the period "Too Long".

(b) With reference to the present length (60 minute or 90 minute) class periods, about half of each group consider the length "About Right" with approximately half of each group (students 49%, faculty-administration 40%) expressing the view that the length of class periods was "Too Long".

(c) Regarding recommendations for next academic year inter-session, a preponderant majority, (students 75%, faculty-administration 86%) favor the present arrangement.

(d) With virtually a majority of both students and faculty-administration favoring both the present class period lengths and inter-session break period, it is recommended that the present pattern be retained on a non-experimental basis for academic 1970-1971 and future years, until or unless compelling evidence arises to consider modifying the current year school calendar plan.

5. Faculty comments regarding the questionnaire items follow:

"The present between semesters vacation is:"

Too Long
(1) The students seem to lose some of their momentum and find it difficult to re-establish study habits.

About Right
(1) Opportunity to travel. Enough time to return refreshed.
(2) It permits faculty sufficient time to organize and prepare for the coming semester.
(3) Combining semester break and vacation provides complete rest from all duties.
(4) Good fishing time!
(5) For many girls attending Harcum the opportunity to obtain job interviews during a prolonged break during senior year is important.
(6) Time to enjoy the holiday season; recover from speed-up calendar and prepare for next semester.
(7) There is an opportunity to relax, read and reflect.
(8) Good opportunity to fortify yourself and include a vacation (if you can afford it).

The following comments were made by one faculty member. "You will note I am opposed to the present arrangement of length of semester, length of class periods, and perhaps the length of vacations. The school year needs to be better balanced! I can't answer any of these questions. I believe they are the wrong questions!! We should be asking questions about the calendar and length of the semesters rather than vacations! In asking questions about vacations and class periods we are starting at the wrong end - all of this relates to the calendar - when classes begin and end each semester. This question needs to be answered
first - how long should the semester be relative to the objectives of the school? Then length of class period, time and length of vacations should be considered. Another question is - when is the appropriate time for the "Spring" vacation."

"The longer class periods telescope the time - especially in the first semester. Extra-curricular activities, appropriate committee meetings and others, suffer because of lack of flexibility and availability of 7 and 8 periods in this class day - as was formerly the case. 100 minutes with a 10 minute intermission (or 90 minutes) are somewhat long for our present students. I wonder if our scheduling practices would stand investigation as to their relationship to student learning - minutes do not guarantee learning!"

"Further - a great part of the time between semesters was not vacation! Preparing syllabi, etc. took much time of many faculty members."

"There are other alternatives to the calendar - tri-semester is one; starting earlier in the fall so as to have 50 minute periods on M W F and 75 minutes on T Th is another."

"It is not clear to me, yet, why the present calendar was suggested. If it was for academic reasons; or for financial reasons. If the first, it does not seem to have succeeded. If the latter, then more consideration should be given to a calendar that will be both academically and financially satisfactory."

"The longer periods rush the students too much. Learning takes time! Further, other schools finish by Christmas; start somewhat earlier and have 50 minute and 75 minute periods."

"We need to reduce the daily pressure on the students, and perhaps on the teachers and administrators."

"I recommend next year's between semester vacation period be:"
Same
(1) Good fishing.
(2) I like the combined Christmas and semester break time.

Shorter
(1) 2 weeks
(2) Cut off a week

"Do you have any other comments about the between semesters vacation period?"?
(1) Once the college is adjusted to the shortened semester, the inherent value of the calendar will be increasingly evident.
(2) It is my impression that many colleges are thinking about instituting a long break at Christmas.
(3) For the faculty it would be an ideal time to have departmental workshops."
"What are your views regarding the present length of class periods?"

**Too Long**

1. Because each 24 hour day is too short for proper learning for the student. However, the long period (this year) are tied in with the semester length.

2. Th classes are longer than student attention span.

3. I personally prefer the 50 minute period, but I'm sure this preference is a function of habit. I have no strong feelings about the longer periods. Any school calendar has shortcomings. I believe that the current calendar overcomes many of the problems of the previous one. Educationally, the more concentrated semester is superior. We must adjust our assignments and academic demands to be consonant with what can be reasonably expected in the shorter period.

4. 1 hour and 30 minute periods twice a week is too long. Will ultimately prevent work from being effectively covered. The 60 minute period is fine.

5. Should all be 60 minute maximum.

6. Attention span of the students not long enough for this type scheduling.

7. Our students need smaller amounts of information at one time if they are to understand the material thoroughly. Their attention span is relatively short, and thus it would be better to have shorter periods. But, if this approach is used, the semester should be longer, not the length of the class day.

**About Right**

1. Allows time for passing and collecting supplies. Teaches the value of a 60 minute hour!

2. Adequately suits my subject field.

3. Additional time allows more discussion time during the lecture.

4. We need the time in studio work.

5. Time for details, teaching and discussion.

6. Attention good; possible to teach without feeling rushed.

7. Fine because class participation can be accommodated to include everyone.

6. Summarized student comments regarding the questionnaire items follows. They are listed in descending order of frequency.

"The present between semesters vacation is:"

**Too Long**

1. Boring - 28

2. Hard to return to studying after this long break - 9.

3. Prefer starting 2 weeks later in September and having 2 week less vacation break - 3.
About Right
(1) Enough time to really rest and relax - 45
(2) For vacation traveling and doing the things you want to - 35
(3) Like having exams before vacation - 29
(4) Boring if longer - 28
(5) Enough time to take a job - 25
(6) Ready to return - 21
(7) Just great! - 16
(8) Better to be off earlier before Christmas and come back a week earlier; still having 4 weeks - 6

"Do you have any other comments about the between semester vacation period?"
(1) I feel it is much better to have the vacation longer and having finals before Christmas.
(2) It is my first experience, since at home we only have two weeks winter vacation.
(3) Instead of 2 weeks after New Year, there should be one before Christmas week and one after New Years.
(4) I think it was good.
(5) I got bored.
(6) I like having exams early rather than having them when vacation is over.
(7) A slightly longer vacation would also make it possible for students to work in between semesters.
(8) It's good if you get a job - but otherwise all your friends from home go back to school and it leaves nothing to be done.
(9) It could be longer.
(10) I liked this because exams were over with and forgotten when vacation started: No worries!
(11) Should run a school session for people to pick up extra credits.
(12) It's much better to have final exams first and then the vacation. That way there is nothing to worry about.
(13) The idea that we do have finals before Christmas vacation is much better.
(14) Go home two weeks before Christmas
(15) 4 weeks is time for rest from the past semester and get ready for the next.
(16) We should be given one day of adjustment back to school.
(17) I prefer having finals before Christmas.
(18) I like having exams before the vacation.
(19) The present system is good for those who must travel by plane.
(20) To keep having the exams before vacation.
(21) It was a very good rest, and by the time it was over most people were ready to come back.
(22) They should be more in line with other college's vacation days.
(23) I don't think we should start school the day we get back from vacation.
(24) It would be better if the 4 weeks were split into two 2 week vacations.
(25) Most colleges do have the same amount of time except not right in a row; they go back to have exams, but I like our system better.
(26) It is a good idea to have it after finals.
(27) Yes, we should be able to come back to school to spend some time if desired.
(28) It's better to have exams before vacation - it's a good system.
(29) I thought it was a good length.
(30) I think it's great.
(31) Start earlier; end sooner.
(32) It would be appreciated if we received the list of books we will need so we can research the subject.
(33) You could not find Christmas jobs because we got out too late to help for Christmas and then we had a month in Jan. when they didn't need us anyway.
(34) Let us know what term papers are needed so some kids can do reading over vacation for a head start.
(35) Just make it a week shorter and let us out the first week in May.
(36) It was a great recuperation period.
(37) I really liked the vacation. It gives a person time if they wanted to work.
(38) It was good having exams before vacation - your mind can be free.
(39) I thought it was great having our exams before vacation.
(40) It was great because you didn't have to spend your Christmas vacation studying.
(41) Just continue to have exams before vacation.
(42) The idea of exams before vacation is a very wise one indeed. To push all work out of the way for relaxation is needed for the student body.
(43) Having the exams before vacation was a good idea. Relieves the tension during vacation.
(44) It was very good in many ways other than not having to worry about examinations.
(45) I like having exams before vacation - that way they are out of the way and nothing pressuring you when you come back.
(46) One week during the spring would serve a better purpose than dragging it out over Xmas vacation.
(47) It was good to have exams before vacation because you then didn't have to study and worry.
(48) I like exams before vacation.
(49) Exams should remain before vacation.
(50) Exams should be before Xmas - to be free of worries.
(51) I think the break was just the right length. Also I liked the idea of having exams before.
(52) Vacation period right length. Like having finals before vacation.
(53) I fully approve of having exams before vacation.
(54) Like final exams before vacation.
(55) It's better to have exams before break.
(56) I like exams before break.
(57) I think the length of vacation is just right.
(58) I think it is much better to have exams before vacation.
(59) It is a welcome break.
(60) Approve of exams before vacation.
(61) Exams before vacation are just great.
(62) I think it's 100% better to finish exams before vacation.
(63) It is very good - having exams before break.
(64) Any shorter wouldn't be good.
(65) My suggestion is that we get out a week earlier and return a week earlier than we did.
(66) I like having finals before exams.

It is clearly evident from the comments offered that having exams before vacation is by far the most popular reason for having the semester end before Christmas-intersession break.

7. Student comments regarding their views about the present length of class periods included:

Too Long
(1) Hour and forty minute classes are too long - they drag.
(2) It depends on the teacher
(3) 90 minutes are too long
(4) 1 1/2 hours too long - and boring
(5) Hour and a half class too long
(6) 1 1/2 hour lectures are terrible!
(7) Hard to sit in class for so long.
(8) Should be no more than 1 hour long
(9) Too long to hold interest
(10) Should be 45-50 minutes. An hour becomes dull and boring.
(11) Attention Span is not that long.
(12) Should be 45 minutes

The additional 125 "too long" respondents indicated the same general comments; becomes boring when more than an hour.

About Right
(1) One hour classes are fine.
(2) It depends on the interest you have in the class - but in general the present length of time is OK.
(3) Long enough to make class interesting.
Too Short

(1) There should be 15 minute breaks between classes to give you enough time to finish a cigarette, look over your notes, and talk to friends.

(2) I'd like to have more 1 ½ hour period classes each week.

(3) I feel that all classes should be 1 ½ hours. You accomplish more and I don't have to review as often, the same things you discussed last period.

(4) Quantitative analysis class too short to get all of the work done.

Zm. Blai, Jr.  Ed.D.
Director of Research

February 1970
democratic philosophy of freedom, individualism, and usefulness." (6:96)

Cowley conjectured that French influence might have continued to grow in importance except for three circumstances:

(1) The Catholicism of the French.

(2) Opposition to French liberalism by the Federalists of New England. Besides, Paris was considered too wicked a city for an innocent lad to be sent for an education by an responsible parent.

(3) The rise of German universities. France, like England, neglected scientific instruction in their universities so that, except in the fine arts, few Americans studied in Paris after the middle of the nineteenth century. (7:46-47)
III. German Metastasis

All of the previously mentioned ideas would have been of little importance to the junior college idea if it had not been for the influence of the German gymnasia and university upon American educational leaders in the 1800's. These German institutions gave direct impetus to the returning Americans for the idea of the junior college and to implementing the concept.

Impregnation of an Idea

It was in the late eighteenth century and especially in the early nineteenth century that German universities shifted their emphasis from teaching to becoming "the workshop of free scientific research." (5:175) As word of Germany's intellectual opportunities spread, a trickle of American students started to flow to German shores. By 1850 only 200 had made the transatlantic scholarly migration, but the trickle soon swept into a wave as some 10,000 Americans followed the early pioneers by 1914. (7:47)

They returned from Germany as academic missionaries to their homeland to preach the educational gospel of the German universities. One of their primary convictions was that the freshman and sophomore years of the American college had more in common with secondary education than with a university. (24:22) They had seen that one of the key features to the success of the German system was that the gymnasium took care of the fourteen years of preparatory "general education" needed by students. With this preparation, they could
devote themselves to specialized and "scholarly" endeavors upon arrival at the university.

**Gestation: Tappan, Prowell and Others**

American educational leaders who set out to transform higher education to the German model followed two courses of action: the majority of them attempted to adapt the established college built on British, Scottish, and French foundations to the German ideal while a small number of leaders attempted to establish independent universities unhampered by historical traditions.

The chief leader of the former group was Charles Eliot of Harvard. The latter group had the most pertinence to the development of the junior college idea. Leaders of this second aggregate of avatars included Henry Tappan (Michigan), Daniel Gilman (Johns Hopkins, California, Yale), G. Stanley Hall (Clark University), William Rainey Harper (Chicago), and David Starr Jordan (Stanford), among others. (7:54)

As President of the University of Michigan in the 1850's, Tappan has been commonly noted by authorities as the first of the German university graduates to urge the transfer of secondary work of the university to the high school. (2:24; 10:18; 29:46) Furthermore, in his 1851 classic, University Education, he promoted the idea of a university being surrounded by two-, three-, or four-year colleges. (28:53)

Another early proponent of the German system, William W. Folwell, returned to Tappan's theme of giving secondary
schools all responsibility for preparatory work by stating at his inauguration as President of the University of Minnesota:

Now immense the gain...if a youth could remain at the high school or academy, residing in his home, until he had reached a point, say, somewhere near the end of the sophomore year, there to go over all of those studies which as a boy he ought to study under tutors and governors! Then let the boy, grown up to be a man, emigrate to the university, there to enter upon the work of a man.... (11:37-38)

In a footnote to his published address, President Folwell remarked, "That (the proposal) was not openly and vigourously denounced, was due to the fact that it was not understood, or if understood, was not taken seriously." (11:33)

Concern over the need for reform continued to be felt by university presidents through succeeding decades. Edmund J. James of Illinois and Pennsylvania, Richard H. Jesse of Missouri, Andrew S. Draper of Illinois, and Cornell University's first two Presidents, Andrew D. White and Charles Kendall Adams, were among those who pressed for action. (10:18; 27:17)

Eells has succinctly summarized the synergism of these early pioneers:

None of these efforts of university administrators to differentiate lower division work seem to have had any permanent effect. They are of historic interest as indicating early convictions on the part of a few educators that there should be greater differentiation of functions of so-called lower division, if indeed not entire separation of it from the university proper. (9:46)
IV. Fathering the Junior College Idea

Three men were responsible for bringing the junior college idea to fruition. They were William Rainey Harper, founder and guiding beacon of the University of Chicago; David Starr Jordan, sire and helmsman of Stanford University in California during its first turbulent decades; and Alexis Lenge, first a Professor of English at the University of California at Berkeley, then an administrator for almost thirty years at that institution successively as Dean of the College of Letters, Dean of the Graduate School, Dean of Faculties, and Dean of the School of Education.

All three were heavily influenced by the German university-gymnasia plan, either through their doctoral work under the direction of German-educated professors at leading American universities, graduate study in Germany, or through contact with an early experimental program at the University of Michigan. (30:522, 651, 703)

Their importance lies not only in the proposals they made, but more fundamentally, in the actions that were carried out through their efforts.

William Rainey Harper

Harper was an exceedingly capable, persuasive, energetic scholar and administrator who founded the University of Chicago in 1890 as an "instant" great university of the world.

While other university presidents clucked hither and yon about how rotten a general education egg they had in their curricular midst, President Harper went purposefully about his business and hatched his junior college idea.
The junior college movement that has grown from his initial efforts has rightfully acknowledged him as the "Father of the Junior College." (4:20; 9:47; 13:39)

Some of his main accomplishments pertaining to the junior college can be summarized as follows: 1) The term "junior college" was coined by him. 2) He institutionalized the separation of the freshman and sophomore years at the University of Chicago into a junior college, disjoined from the "senior college." 3) It was through his direct intervention that the first public junior college, and a network of such institutions, was founded. 4) Reticulations of junior colleges, public and private, were created in various states under his influence. 5) He propagandized for the idea in speeches, articles, and books—all to notable affect.

Harper advocated at length three ways of creating junior colleges. The first was to separate in a university setting the first two years of college from "real" university work of the junior and senior years. His idea was adopted by a number of universities in the form he suggested, but the idea evolved into the limited separation of "lower-division" and "upper-division" at most campuses.

It was at his own institution that complete separation was first implemented. In 1892 Harper created the "Academic College" to embrace the freshman and sophomore years while the "University College" included the upper years. The "Academic College," while not detached from the University, became a corporate unit with its own faculty, curriculum, living groups, and student government. The Senior College
became closely aligned with the graduate school. (25:143-144)

"Academic College" and "University College" were awkward terms, did not suggest the real difference in the nature of the two groups, and did not receive ready acceptance. In 1896 the happier designations of "junior college" and "senior college" were adopted. They continued to be used until reorganization took place at Chicago in 1931 under Hutchins. (9:47) This is acknowledged to be the first application of the term "junior college" to a functioning institution. (9:47; 10:18-19; 26:45)

A second method he urged was the transformation of weak four-year colleges into substantial, academically "honest" two-year junior colleges. The proposal was first enunciated, in his now-famous analysis of the small college's situation, at the annual convention of the National Education Association in Charleston, South Carolina, on July 10, 1900. It was also in this address that the first mention of the term "junior college" was used in the sense of an independent institution, detached from a university setting. (9:61)

It is probable that a careful examination of the colleges now chartered in the United States would show that at least 20 to 25 per cent are doing work of character only little removed from that of an academy. This means that the term 'college' has been misappropriated by these institutions. . . .

While therefore 25 per cent of the small colleges now conducted will survive, and be all the stronger for the struggle through which they have passed, another 25 per cent will yield to the inevitable, and, one by one, take a place...(on the academy level) of educational work which, though in one sense lower, is in a true sense higher. It is surely a higher thing to do honest and
thorough work in a lower field than to fall short of such work in a higher field. 
(The remainder) ...of these small institutions will come to be known as junior colleges. I use the name 'junior college,' for lack of a better term, to cover the work of the freshman and sophomore years. 
There are at least 200 colleges in the United States in which this change would be desirable. (12:81, 82)

Harper asserted in this speech that if the small college was reduced to junior college status, the following would be accomplished:

1. The money now wasted in doing the higher work superficially could be used to do the lower work more thoroughly.
2. The pretense of giving a college education would be riven up, and the college would become an honest institution.
3. The student who was not really fitted by nature to take the higher work could stop naturally and honorably at the end of the sophomore year.
4. Many students who might not have the courage to enter upon a course of four years' study would be willing to do the two years of work before entering business or professional school.
5. Students capable of doing the higher work would be forced to go away from the small college to the university. This change would in every case be most advantageous.
6. Students living near the college whose ambition it is to go away to college could remain at home until greater maturity had been reached— a point of the highest moment in these days of strong temptation. (12:83)

Eells has stated that these reasons, given in the opening year of this century by the founder of the junior college movement, "are almost equally valid for all types of junior colleges, and form a remarkable Bill of Rights or Magna Carta" for the junior college. (9:61)

Harper's plan of a four-year small college changing to two-year status and affiliating with a university was, on the
whole, not successful, although it was adopted quite effectively in Missouri and Texas, and some other parts of the country. These successes will be discussed more at length in a later section. His small college plan probably was thwarted, in part, because he spoke of "cooperation" with public high schools, but of "affiliation" with private academies and colleges. In the minds of many, "affiliation" no doubt suggested depriving the institution of its independent existence. (9:62)

Harper felt that the greatest gains in creating junior colleges would be through the extension of four-year high schools into six-year institutions, with these extensions eventually evolving into separate organizations. The public high schools in and around Chicago, and some farther away, proved receptive to Harper's persuasions; by 1904, between twenty to thirty of them were six-year schools and an unspecified number had established separate collegiate institutions. The first of these was in Joliet, Illinois, in 1901, which not only was the first public junior college to be founded as a separate organ, but still continues to operate to this day as a community college. Harper had influenced a close friend of his, J. Stanley Brown, Superintendent of Schools in Joliet, to create the junior college, and was a central figure in the development of it during its early years. (14:114)

President Harper's untimely death in 1906, before he had reached fifty, deprived the educational world in general and the junior college field in particular of a most
effective leader. It was at this juncture that his contemporaries Jordan and Lange were to begin to see their efforts on the West Coast activate towards a vortex.

Conception on the West Coast

Like Harper, Jordan and Lange saw the main solution to their problem of making their respective institutions "true" universities, along German lines, through the extension of the high schools.

For over thirty years Jordan and Lange were organizers and popularizers of a state-wide drive which soon made California the national leader of the junior college movement through its creation of a state-wide network of junior colleges offering both transfer and two-year terminal programs.

The year following Harper's death turned out to be a turning point in their efforts: 1) The first legislation of any state concerning the junior college was passed by the California state legislature. Its provisions gave a legal basis for the junior college in that state. Authorization was made for the board of trustees of any high school to

...prescribe post-graduate courses of study for graduates of such high school, which course of study shall approximate studies prescribed in the first two years of University courses. (25:144)

2) The University of California awarded the first Junior Certificate degrees, which had been made a requirement for admission to upper division work. This Certificate could be earned through college-level courses offered by high schools and/or the University. (25:145) 3) Jordan formally proposed to eliminate lower division work at Stanford by 1913. (25:146)
David Starr Jordan

Jordan, as the head of the budding Johns Hopkins of the West, was the most influential figure in higher education in California during his time. He is given credit for the introduction and popularizing of the term "junior college" on the West Coast. Jordan's use of this term in his speeches up and down the state to community groups, Lange affirmed, "proved much more potent (an appellation than 'six-year high schools') in suggestible communities." (18:3-8) For local groups to finance a "junior college" was much more prestigious an undertaking than to just enlarge the high school.

While Jordan was quite successful in getting local leadership to assume the financial burden to develop junior colleges, he was less fortunate in obtaining the cooperation of the Stanford alumni and Board of Trustees in eliminating the first two years of instruction at the University. One reason was the alumni's nostalgia for the "college way of life" of four undergraduate years of comraderie. Closely associated with this argument was one advanced by Hillway—that an upper division university along German lines would be unable to maintain a satisfactory football team. (13:35) A third might have been that Jordan, a true visionary, made his formal presentation before a single junior college had been established in California, although a number of high schools were offering some postgraduate courses. (25:146)
Alexis Frederick Lange

While Jordan had considerable influence with the state's educational leadership, his efforts were perhaps most keenly felt in generating support among the general public. On the other hand, Lange's exertions were most clearly seen in the accomplishments and molding of ideas about the junior college on the part of the educational and political establishment.

The origins of Lange's interest in eliminating the first two years of college from the university setting and of establishing the junior college concept in California was charmingly revealed in a story by Bells. It quite concisely illuminates how the junior college's "gestation period" made possible its inception.

In 1883 the University of Michigan, influenced by German thought, was the first institution to make official recognition of any distinctiveness between the lower and upper two years of undergraduate work by giving upper classmen the chance to specialize along the lines of major and minor work. Lange was a student at Michigan during the very years it was being tried there. Soon it was abandoned, and apparently forgotten. The student who received his master's degree in Michigan in 1885 came to California in 1890 as an Assistant Professor of English. As Bells related in his eloquent style...

...The Michigan conception of functions at the junior level was carried literally and bodily, as a beneficently potent bacillus, so to speak, to the University of California. In Michigan the idea had failed and been forgotten by all in authority, but the chance influence on one student, thus transferred to the California soil, gradually inoculated the youthful state university. (9:45-46, 91-92)
With feeble beginnings in 1892, separation of lower and upper division work was completed in 1903 for the liberal arts colleges of the University when provisions were made for giving Junior Certificate degrees at the end of the sophomore year. (It wasn't until 1907 that the first Junior Certificate was actually awarded.) The same principle was extended to the technical colleges of the University in 1909. (1:92)

Since the Junior Certificate degree program encouraged students to take college-level courses at their local high schools and then transfer the credit to the University, the University itself could describe the Junior Certificate as marking "the distinction between university and secondary education." Dean Lange proudly declared that "what was to be known as the Junior College idea had been essentially put into practice at Berkeley" and the high schools were being encouraged to "utilize locally the percept and example of the State University." (25:145)

Besides being responsible for the development of the Junior Certificate program, Lange was the first important leader to stress the need of the junior college to establish vocational programs to meet the local needs of the community. Under his prodding California became the national leader in creating such programs.

In 1910 California's first full-fledge junior college, at Fresno, was the first exemplification in America of the public junior college as a dual-purpose institution. It aimed to provide practical courses in agriculture, home
economics, mechanical arts, and other technical work, in addition to the regular academic program. (4:118; 10:28, 31)

Illinois's Lewis Institute, a private institution, had been the first genuine example of a comprehensive junior college when it supplemented its "preparatory" or academic curriculum with a few terminal programs in 1896. It, however, later merged with another institution and now is the Illinois Institute of Technology. (4:23)

In one of his most quoted utterances, Lange concisely summed up the case for the comprehensive junior college:

The junior college cannot make preparation for the University its excuse for being.... The junior college will function adequately only if its first concern is with those who will go no farther, if it meets local needs efficiently, if it enables thousands and tens of thousands to round out their general education, if it turns an increasing number into vocations for which training has not hitherto been afforded by our school system. (17:471-472)

Right up until his death in 1924, Lange continued to speak, write, and urge the junior college idea in California, and exercised considerable influence on the development of it as part of the public secondary school system in California and elsewhere. (9:90; 10:19)
V. Infancy

In one of his many concinnous speeches, Lange summarized the origins of the junior college movement by referring to the mythical highwayman of ancient Greece, Procrustes, and his famous iron bed so ill-fitted to his victims.

"...The junior-college idea is in no sense a Procrustes-bed, and its advocates have nothing in common with that legendary highwayman of Attica; yet this bed suggests several very broad questions—questions inseparable from the junior-college movement as a whole. One is: Shall certain colleges have their heads cut off, and, if so, by whom? Another is: Shall the American university-college have its legs cut off, and, if so, where? The third is: Shall the American four-year high schools be stretched, and, if so, how? (17:465)

The three questions raised in the speech, which were also broached by Harper and Jordan in many of their public utterances, were the key problems that American educators had to resolve in adapting the German system of higher education to the American landscape. In typically pragmatic American fashion, all three methods were used according to the appropriateness of the method in the local situation.

Decapitating the Top

American four-year colleges are well-known for their conservative tenor when it comes to curricular change. It is small surprise, therefore, that the revolutionary idea of decapitating curricular heads was of limited success. The three main hotbeds of Jacobin fervor were centered around
that Denton of the Plains, William Rainey Harper; Texas; and Missouri, in which a veritable Reign of Terror swept away financially shaky, ossified heads of little distinction.

Harper's plan and purposes have been discussed. While this aspect of his educational plan was never widely realized, a few church colleges in the Midwest, but not many, did cease giving bachelor degrees and became affiliated with the University of Chicago as two-year institutions. Perhaps the earliest to make the arrangement was Hardin Junior College, a Baptist institution at Mexico, Missouri. (9:62)

Eells has suggested that perhaps Harper's influence was a strong factor in the systematic decapitation that occurred among other Baptist colleges, in Texas. Eells, nor anyone else, has ever offered any evidence to substantiate this claim, however.

It was in 1897-98, several years before Harper's N.E.A. speech, that the Baptists established the first system of correlated colleges incorporating the junior college principle (although they used different terminology). The Baptists in Texas shortly before awoke to the fact that they had a number of weak, competing institutions, which, when combined, were not worth as much as their total indebtedness. The master plan adopted by the state's Baptist convention reduced three senior colleges to junior college status. The junior colleges agreed to end their work with the sophomore year, and in return their graduates were given full admission to junior classes at Baylor University and Baylor College. (9:63-64)
Under what is generally agreed to be the influence of Harper's ideas, Missouri undertook the most extensive changes. What occurred was described by the University of Missouri's President, writing in 1928:

In Missouri we had a lot of colleges that were trying to be four-year colleges and many of those, under our advice and assistance and some of them under grave necessity without any advice or assistance, reduced to what they honestly were, what they could honestly do, namely, the first two years of the college work. In 1911 we began our cooperation with these colleges, persuading several alleged four-year colleges that their own interest and honesty in education required them to devote all of their resources to two years instead of four years of work. The results in those colleges have been very satisfactory to them. They have actually increased their attendance. Parents who could not be persuaded to send their children to a small college for four years, could be induced to send them to a junior college near at home for two years, provided transfer to the university without loss of credit could then be made. Devoting their entire financial resources to the first two years enabled most of these colleges to reach a standard justifying credit for two full years. (9:64-65)

Eliminating the Underpinnings

The essence of the second question Lange posed was to lop off the first two years of the college en toto. Anyone else was to pick up the fallen pieces, or else a separate "junior college" arrangement as at Chicago was supposed to be organized. Despite the fact that this plan had the greatest appeal to university presidents through the years, no major, sustained effort has been accomplished in this area. Proposals or serious attempts to implement the idea have been made at the University of Michigan, 1852 and again in 1883; the University of Georgia, 1859; Stanford, 1907 and
again in 1927; and Johns Hopkins University, 1926, to name just a few of the more prominent examples. (3:82; 8:193-195; 9:45)

The University of Chicago and the University of the Pacific eventually reinstated their freshman and sophomore classes into their university curriculums after highly publicized, long-term experiments. (3:82; 9:47) During the past decade the Florida state university system has engaged in ambitious projects similar to those pioneered at Chicago and in Stockton, California. (19:17-18; 22:18)

Instead of universities having their legs chopped off, the more common pattern has been to multiply the legs—as Bells characterized it, "in centipetal fashion." (9:68) Bogue cited the University of Wisconsin, with its fourteen extension centers, while Pennsylvania State University had seven lower division centers spread over its state. Many other state universities have instituted such programs as well. (3:84)

Stretching the High School

The most successful adaptation of German ideas to the early junior college movement was the extension of high school curriculum to include the first two years of college work. In the infancy period of the junior college it seemed as if America might adopt a six-year high school model similar in length and purpose to the German gymnasia. Instead, the high schools’ upper two years of college-level courses evolved into separate, distinct two-year colleges. To this
day, however, many states administer public junior colleges as legal entities of their secondary school systems.

The American high school, it seems, has always been in a state of flux. As students' ages rose and more education was required by the high school, the subjects of college continually went down into the lower grades. It began with the first well-organized American academy, Franklin Academy, in Philadelphia in 1751, and has continued to this day with the Advanced College Placement program. (1:77)

The question of how many years a high school should have, and just as importantly, which years, was still very much a matter of controversy and experimentation around 1900. The three- and four-year high school did not become a stabilized institutional form until the mid-1920's. (2:25) And as late as the early 1950's the high school in some California communities ended with the tenth grade while four-year junior colleges contained the eleventh through fourteenth grades. (2:26)

The above provides a background against which the stretching evolution of the high school onto the junior college scene can be viewed. The "stretched high school," the "postgraduate courses," and therefore the beginnings of the junior college, reach much further back into antiquity than Harper probably ever realized. Bells has remarked that

There are those who would trace the beginning of the junior college movement...back to the Renaissance, to the prolonged secondary school of Sturm at Strassburg, in the sixteenth century. (9:52)

The earliest instance to be found in America was among
the early Catholic English colonists who founded a Catholic "college" at Newton, Maryland, in 1677. It might be called the earliest American junior college, Deeds said, since in addition to what was basically secondary work, it offered the freshman year of college. If students wished to study further, they "transferred" to St. Omer's in Belgium to complete their studies (England did not have any Catholic colleges). (9:57)

It was in the 1820's to the 1850's that many private New England academies for the education of women, still in existence today, brought a two-year course for high school graduates into existence, since no formal collegiate education was available for women until the 1830's in the South, and in the Northeast until 1853 with the opening of Elmira College. (5:67; 9:57-58)

Other private academies, seminaries, finishing schools, and similar institutions of secondary work in the North and South were to add two years of junior college to their course of study in the late nineteenth century and early part of this century. They did it, however, for financial reasons—otherwise they would have died, due to the competition of public high schools. (3:85-86; 9:57-58)

The public high schools started a number of stretching experiments from 1880 to 1900 but almost all of them were eventually abandoned. The first of these was probably at Greeley, Colorado, when a thirteenth year of work was added in the 1880's. A few years later, in the 1890's, the University of Michigan accepted one year of college work by students
from the stronger high schools. It was not until Harper at Chicago and the Junior Certificate program at California gave encouragement to high schools that any permanent modifications began. (13:36)

Creation of Separate Junior Colleges

Not until the 1920's were junior colleges established without having some previous base of origin, whether it be from below, or from above. For that matter, in the 1921-22 period Koos found that of all the junior colleges in existence, whether they were private or public in control, only public junior colleges in Grand Rapids, Michigan, and Kansas City, Missouri, housed their junior college units separate from the high school facilities. (16:4-5, 9) No light has basically been shed on the first existence of the separately created junior college unit.

The earliest attempts at establishing independent institutions that would have covered work being done by junior colleges were in the educational system of Virginia as conceived in the original plans for the University of Virginia, and also the first Education Act of Missouri. Both contemplated a number of collegiate institutions which would serve as connecting schools between public schools and the university. These middle schools never sprouted however. (9:67)

Perhaps the earliest separate two-year institutions were procreated sideways, in contrast to the upward and downward transitions previously discussed. This was the
case where two-year normal schools added a general education junior college curricula not designed especially for teacher training. This enabled some students to take their first two years at a normal school and then transfer to a regular college without any loss of credit.

In 1911 the Wisconsin state legislature established the legal basis for this type of operation and California also set up a similar plan. By 1921 J. Stanley Brown, at that time the President of the Illinois State Normal School, could speak of normal schools at the first annual convention of the American Association of Junior Colleges as "junior colleges of a certain type." (9:58-59; 10:21)
VI. World-Wide Influences on the Enfant Terrible

Franklin Parker once characterized the junior college as the "enfant terrible" of American higher education. (25:193) Thus far, mention has been made only of the mutagenic processes from particular countries that have affected the development of the infant.

In addition to these nationalistic factors, three worldwide forces have had telling affects. Cowley has identified the first two as the rise of science and the development of machine technology, to which a third component, the expansion of democracy, should be enumerated. (7:65)

Science, except for some beginnings made in Germany, developed outside the realm of the world's universities until the latter part of the nineteenth century. Machine technology sprang up independent of science and paralleled its development for at least a century. Machine technology then joined with science during the middle of the nineteenth century to transform European and American life from agricultural and maritime societies to mechanized economies. In the United States the changes were perhaps more spectacular than in any other nation. With the scientific and technological advancements came the need for more education on the part of the masses, through technical curricular programs, to provide skilled labor.

It was during the 1910-20 decade that the ideals of democracy swept the world. A World War was fought "to save the world for democracy." The long-standing Austro-Hungarian,
Russian, German and Ottoman Empires collapsed as a result of that war while the Chinese Empire had folded shortly before the war's commencement. One hundred years before kings and emperors had traveled to Paris to carve up kingdoms and principalities out of Napoleon's Europe, but at Versailles in 1918 representatives of democracy came to divide up the continent into republics with place-names like Finland, Estonia, Czechoslovakia, and Turkey. Equally important was the fact that in the constitutional monarchies, Socialist and Labor parties took control of the governments for the first time.

The feminist movement was part of this spirit of spreading democracy. Most women gained the vote in England in 1918 and two years later women were granted the electoral franchise in the United States.

It was in this ebullient spirit of extending democracy that the junior college, America's "democracy college," was to thrive as it advanced into the 1920's.
VII. Conclusion

Mutatis mutandis by 1920 had enabled the fledging junior college to make its professional debut in the academic community. In that year the American Association of Junior Colleges was formed to provide a "forum and a focus," as Brick has described the situation, for the junior college movement. Two hundred and seven junior colleges were in existence (70 public, 137 private), with 16,000 students enrolled, fifty-two per cent of them in public institutions. (4:24-25)

The junior college had a host of siblings among normal schools, institutes, seminaries and four-year colleges. By assuming the name "junior college" or by developing programs in harmony with the purposes of the movement, they became closely identified with the infant. Without these institutions, Fields has observed, "it is doubtful whether the (junior college) movement in its early stage would have attracted as much attention as it did." (10:23)

The respect that it commanded very early can be seen in Koos' study in the early 1920's that all colleges accepted the hour by hour recognition of course credit of almost all junior college transfer students. (15:79-86)

By 1920 the junior college had integrated its European traits. The English, Scots, and French had been the palin-genesian agents for its philosophical perspectives and personality while German influences had been responsible for its physical dimensions. The former had helped it to place its values in general education, practical courses, teaching-
centeredness; to be democratic in outlook, non-residential in nature, and be governed by lay representatives of the community. The latter had inseminated its conception and fed its early growth.

So it had achieved a certain sense of maturity. It was essentially an "academic" persona in its curricular makeup. However, the academic junior college was becoming increasingly engrossed with vocational education. Even in 1917 a survey of nineteen public junior colleges revealed that eighteen per cent of the courses they offered were "terminal," i.e., oriented towards the vocationally-minded student. (20:52)

Together, academic and vocational education would have gathered by 1945 a family of guidance, adult education, and community service functions that would transform them into a thriving collection called the community colleges.
Bibliography


16. _____, The Junior-College Movement, Boston, Ginn and Company, 1925.


