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DESIGNING STATE INCENTIVE PROGRAMS THAT WORK IN HIGHER EDUCATION

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Political leaders in the 1980's have been attracted to the use of incentives to achieve state goals. The Reagan administration's philosophical support of deregulation and decentralization encouraged incentive approaches. There is also increased recognition of the limits of mandates and regulations in bringing about program improvement in health, education, and other human service areas.

The greater use of incentive approaches in the public sector is a part of the "market strategy" of voluntary participation, rather than relying primarily on rules and coercion. Charles Schultz (1977) is one of the best known and most influential advocates of the use of incentives rather than regulations. He supports the normative proposition that voluntary compliance is better than coercion in organizing society (or higher education). Schultz observes that too often, "Instead of creating incentives so that public goals become private interests, private interests are left unchanged and obedience to public goals is commanded" (Schultz, 1977, p.8).

The other argument for incentives is that they will be more efficient in achieving objectives than will regulations, especially when the regulator has limited control over the individual or organization that is responsible for goal achievement.

These arguments for the advantages of incentives over regulations should find a receptive audience among public college and university administrators, since they have been guarding the academy against the encroachments of external regulators for decades. The necessity of autonomy and self-regulation for higher education and the dangers of political intrusion are prime values in the academy.

Therefore it may seem paradoxical that state funding for higher education has made only limited use of incentives in the past. Budgets have been based primarily on formula based workload estimates or incremental adjustments to prior year budgets. College presidents have not been in the forefront in calling for incentives or greater use of market strategies, those pressures have come from businessmen and state and national political leaders.

Among the administrator's primary criteria for a good budget system are predictability and stability. The use of either monetary incentives or sanctions tends to destabilize the budget process. Even if sanctions are excluded, and only the reward side is considered, institutional leaders are unable to count on the resources in advance. The primary objectives of institutional leaders are to get as large a base budget as possible, make it as predictable as possible, and have as few external controls on spending as possible.

The state, on the other hand, has a growing interest in the effectiveness of higher education expenditures, and it may have priority goals that it want its higher education system to accomplish. Adding to the base budget is less appealing to state leaders than targeting money on specific objectives, and the use of incentives is consistent with the push for accountability (Carruthers and Marks, 1989).

Institutions already participate in competition for students, which introduces an element of uncertainty into their tuition income, and in some

state systems enrollment fluctuations will affect appropriations as well. Institutions and their faculty also complete for research funds, so there are already elements of the market system and incentives in public higher education budgets.

What is new is the increased use in state higher education budgets of categorical funds for special purposes, many of them distributed either competitively or as incentives for performance (Carruthers and Marks, 1989). The appeal of incentives to business and political leaders is strong, they have seen that incentives "work" in their businesses.

The record of incentives for performance in higher education is mixed. Some incentive programs have been successful, and others have not worked nearly as well (Briefing, 1989). Among the most controversial have been merit pay plans in the public schools. With only a few exceptions, they seem to have failed as motivators of more effective teaching performance. Among the most successful incentive programs have been state matching money for endowed chairs or endowed scholarships. Almost without exception, institutions have responded, and have been able to raise the additional funds needed to match the state incentives.

This paper examines the conditions necessary for successful incentive programs, and analyses the Tennessee experience with incentive programs in higher education to illustrate both the difficulties and potential successes of incentives.

While the entire budget contains incentives for action,, the term is used here in a more specific way to include funding that is designed to encourage action or achievement of specific policy objectives. The policy objectives are usually expressed in terms of desired results, such as improved student learning, or a reduction of the drop-out rate. When the outcomes can't be specified very

precisely, or when they can't be measured very well, activities related to the outcomes may be surrogates for the outcome, and may be the target for incentive funding. For example, funding may be contingent on the activity of launching a minority recruitment program, or funding may be contingent on achieving results, such as a 20% increase in minority enrollment.

There are important differences between incentive programs based on achieving results, and those that induce activities without requiring results. The former can be characterized as primary programs, while the latter are secondary.

It is important to understand the assumptions on which incentive programs are based. If primary incentive programs are to work, the following assumptions have to be met: (1) The organization or individual has the capacity to achieve the result or goal. The purpose of the incentive is to increase motivation to assure that the capacity is directed to the goal. (2) The goal being rewarded is the actual goal or outcome sought. If there is significant goal displacement, the incentive program won't work. (3) The efficacy of monetary motivation. (4) The incentive is available to the individuals or parts of the organization who are responsible for results. This is particularly important in the university, where responsibility for education is decentralized to the faculty and shared between faculty and students. (Church and Heumann, 1989; Elmore, 1985).

If secondary incentive programs are to work, there is an additional assumption which must be met. There must be a positive relationship between the conduct of the activity, and the subsequent achievement of the desired results. For example, if future leadership ability of graduates is the goal, and better lectures on leadership is the activity, there must be a positive

relation between the quality of lectures and subsequent leadership behavior.

Capacity. Colleges and universities are often assumed to have the capacity to implement programs, when the evidence of their ability is unclear. For example, most colleges admit substantial numbers of underprepared students. Colleges and college faculty may be very poorly equipped with knowledge of how to help underprepared students succeed, but they may be mandated and/or rewarded for establishing remedial programs. One of the primary questions that must be asked is--Is there a technology (knowledge and skills) that is available to solve this problem, if not, incentives won't do the job.

If an individual or organization knows they can't achieve the goal, providing an incentive is not motivating. Most of us would not be motivated by a million dollar incentive to run a four-minute mile. More ambiguity exists in most situations, when it may not be clear whether or not progress can be made toward the goal. A faculty member may believe they can teach remedial students, because they believe they can teach anyone. So they may be willing to participate in the program if the standards for improvement are not too high, and the rewards are large enough (or the potential sanctions for non-participation are large).

Goal Displacement

Incentive programs are designed to increase motivation to pursue a specified goal. There may be sanctions for not pursuing it, or rewards for successful goal achievement. In higher education, there are multiple general goals that the state has, that institutions have, and that individual faculty have.

Some of these goals have measures that can be used to ascertain progress, or the lack of it, and can be used as the basis for rewards or sanctions. for

example, there are numerical goals for minority student attendance and graduation that can be monitored fairly easily. Other goals such as improved student knowledge and skills are much harder to measure. The desired outcome may be graduates with leadership skills and the ability to solve problems and function effectively in the multi-cultural society of the future.

These future outcomes can't be measured directly, so a current surrogate is chosen, such as a test score. If test score improvement is rewarded, it becomes the goal, whether it is closely related to the actual goal being sought or not.

Another form of displacement can occur when faculty or institutional goals and measures are substituted for state goals when the state goal, or a measure of it is hard to specify. For example the state may have a goal of improved quality of education, but lacking a clear measure of improvement, they allow the institutions and faculty to define and measure quality improvement. This can occur when a peer review process is used to judge the effectiveness of an academic program or research product.

Peer review may be better than any of the alternatives for judging quality improvement of complex professional tasks, but it represents the substitution of faculty standards for those of the state. Displacement occurs if the faculty and state views of quality improvement are substantially different. If they are similar, or the state is willing to accept the faculty judgment as the "best" then there isn't a displacement problem.

Efficacy of Monetary Motivation. Institutions and the faculty within them are motivated by money, by recognition, and by the intrinsic interest and rewards of their work. The state has little influence over the latter two sources of motivation. Institutions have some control over recognition rewards to the

faculty, but the major recognition rewards are controlled by the disciplinary and professional organizations (Briefing, 1989). These multiple sources of motivation make the design of monetary incentives more complex, but since money is an important motivator, even within the academy, properly designed monetary incentives are likely to work.

Organizational Structure and Incentives

Universities have a decentralized collegial governance, with a high degree or professional specialization. The incentives must be provided to the individuals or the part of the organization responsible for the activities if they are to have any motivating effect. This is obvious, but it is frequently overlooked. Incentives are offered to the institution, without assuring that the institution offers them to the key groups within the institution. The research effectiveness of the institution depends on the faculty, while the educational effectiveness depends on both faculty and students. The incentive program must motivate both faculty and students if it is expected to improve the educational program.

The assumptions described above can be thought of as criteria for designing successful programs. If the criteria are met, the chances that the program will be successful are good.

The most successful incentive programs in higher education have been those that provided matching money for fund raising for endowed faculty chairs or for scholarships. These have a simple and easily measured goal of encouraging more private fund raising. Institutional capacity has proven adequate to the task, although some institutions are much better than others at fund raising, and some of them have more access to wealthy donors than others. It is not easy to provide fund raising rules that provide a "level playing field" for competition,

but there are ways to structure these programs so that they are perceived as fair and institutions are motivated to participate.

Goal displacement is not a problem as long as the goal is defined as raising more money from private sources. If the goal is stated in terms of the qualifications of the recruit to an endowed chair, or the chair's effect on the educational program of the institution, then other goals are introduced and the evaluation of the "success" is more difficult.

Questions should be raised about the cost effectiveness of matching fund programs. Institutions are already motivated to raise more money, and the state may not need to increase the motivation with a fifty-fifty match. A one third-two thirds match or even a three or four-to-one match would raise more money from private sources per state dollar spent, and might be adequately motivating to both institutions and donors.

A second state use of incentives that has been successful are competitive research and/or educational improvement funds. Institutions have competed for a number of years for federal research funds, and to a lesser extent have experience in competing for program improvement funds. These are programs that reward institutions for activities rather than results. The competitive aspect can increase the probability of funding programs that achieve the goals of the program, but competition alone will not assure successful programs. If the competition is highly selective, with only a few awards, there may be a negative effect on the motivation of non-winners. They will not seek the goal because they weren't successful in getting funds.

Competitive scholarships for students are a third widely used incentive program; they have also demonstrated that they can affect the choice of institutions for enrollment of good students. Since most of the good students

go to college anyway, this effect on overall enrollment levels is less clear. If the state's goal is to keep more of its top students at in-state institutions, competitive scholarships may have an effect, but their overall cost-effectiveness depends on the goals sought.

The most difficult state goal for incentive funding is the improvement of undergraduate education. The goals of a baccalaureate education are multiple, and usually stated in broad general terms, which are hard to measure. The capacity of the institution to improve itself may be uncertain, and the institution will make the case that their ability to improve is dependant on the receipt of additional resources. The institutional assumption is that motivation is always adequate to improve, and that all that's needed are additional resources to make improvement occur. Analysis of Florida higher education expenditures in the 1970-1980 period indicated that when unrestricted resources were provided, the faculty put a higher priority on research and graduate teaching than more attention to undergraduate education (Berdahl and Studds, p. 32). This unsurprising finding demonstrates that goal displacement is likely when institutional and faculty goals diverge from state goals, particularly when the definition of quality enhancement is not precise.

The most explicit and oldest effort to use fiscal incentives to improve undergraduate education is the Tennessee performance funding initiative. This unique effort, which other states have watched but none have copied, is a very instructive case study of one state's effort to utilize incentive funding principles as a part of their regular budgeting process.

Tennessee Performance Funding Origins

The performance funding initiative developed from criticism of the formula funding process used in Tennessee. Critics correctly observed that the formula

did not recognize differences in program quality, but counted enrollment and program differences as the basis for funding. In addition, in the early 1970s the university presidents were interested in an additional rationale for increased budgets since enrollment growth was leveling off. Tennessee enrollment grew at about 4-5 percent a year between 1970 and 1978, it grew about one percent a year from 1979-1983, and overall it has been stable between 1984-1988, although a few campuses have continued to grow slowly during the 1980s.

The idea of "pay for performance" was quite popular with legislators. The performance funding concept appeared to have a built-in accountability that was very appealing to legislators. While some of the presidents were negative to the idea, the majority of institutions gave support to the concept of tying a portion of the funding increases to performance measures (at the time unspecified), especially if this was going to be effective in getting more money from the legislature.

A pilot project was initiated by the Tennessee Higher Education Commission (THEC) under the direction of Grady Bogue, with funding from the Kellogg Foundation, FIPSE, the Ford Foundation, and an anonymous Tennessee foundation. The project began in 1975 and continued to 1978. About half the colleges and community colleges conducted pilot studies of ways to assess quality. These pilot projects were also expected to build faculty involvement in, and a sense of ownership of, the assessment process. Evidence is scanty that they achieved this second purpose, because the project remained a state directed effort, sponsored by THEC.

After considerable discussion with both legislators and the institutions and their governing boards, the THEC came up with the initial Performance Funding (renamed instructional improvement fund) proposals in 1979. The embodied

multiple assessment approaches, and institutions could earn points on five different criteria which included initiating and continuing an ongoing assessment process. Institutions were competing against their own past record, and initially could earn up to two percent of their state appropriation by participation. During the 1979-82 period, the main emphasis in the performance funding criteria was on implementing an assessment system that met state guidelines. These initial assessments would allow baselines to be firmly established. When the assessment system was in place, demonstration of improvement could be verified and documented. This phase continued until 1983, when a new set of guidelines was introduced that increased requirements for demonstrating improvement. At this time the size of budget incentives was increased from two percent to five percent.

Because the assessment procedures and results were explicitly tied to funding decisions, the budget formula rules of fairness and equity of treatment were involved. This tended to formalize and bureaucratize the assessment process. The initial rules for assessing progress covered a half dozen pages. The 1987 version of the guidelines was 33 pages, single spaced. Instead of feeling that they had control of the assessment process, institutions saw the THEC as the rule maker and evaluator. When a complex process of assessment is involved, with a large amount of money at stake, complex rules are developed to assure fairness and to reduce the chances of gaming. Over the eleven-year period of the program's operation, over 102 million dollars has been allocated to the universities and community colleges and technical institutes. In FY90, the current year, $17.5 million was distributed to the 23 participating universities and community colleges and technical institutes.

In the first year that funds were available for the budget (FY 1981) awards

ranged from 34 to 67 percent of the total that could have been earned in the universities, and from 10 to 65 percent in the community colleges. Amounts earned in one year are included in the next year's budget, for expenditure two years after they are earned.

Figure one shows that both the community colleges and universities were able to increase the proportion of the incentive funds they were able to claim from a beginning point of about 50 percent for the universities, and 37 percent of the community colleges to about 90 percent for both sectors by 1985. The range of percentages of the incentive funds obtained in the current year (FY 1990) is between 32 and 89 for the universities, and 70 and 96 for the community colleges. THEC revised the criteria for funding in 1983, as mentioned above, and the revised criteria are reflected for the first time in the FY 1986 percentages. The commission with extensive consultation from the institutions, made a second revision in 1987, which is reflected for the first time in the FY90 allocations. The second revision changed the weights of some of the items, dropped a process criterion, and put more emphasis on demonstrating performance.

The funds are not earmarked, and can be expended in whatever way the institution chooses. Institutions do not identify the funds in the budget, so there is no way to tell what they have been spent for.

None of the institutions have introduced incentive funding principles within their institution to motivate more departmental or school improvement. Memphis State University (the second largest university in the state) developed a proposal to use performance rewards at the school and departmental level, but the idea was abandoned after negative reaction from department heads and deans.

The program remains an incentive to <u>institutions</u> to improve on the following criteria: (1) increase the proportion of their programs that have

specialized professional accreditation, (2) increase the level and gains that their students show on a measure of general education (the ACT Comp.), (3) improve the scores of their seniors on licensing and other exams in their major field (for two-year institutions placement rates substitute for field exams), (4) increase alumni satisfaction with the program (based on alumni surveys), and (5) taking corrective measures to remove weaknesses revealed in their programs. A sixth "bonus" criteria is developing and piloting new assessment instruments. An institution cannot get over 100 percent, through use of the "bonus."

To what extent has the program been able to improve undergraduate education in demonstrable ways after a decade of operation, and the expenditure of over 100 million dollars?

Evaluations of the Tennessee Instructional Improvement Fund

There have been several evaluations of the Tennessee program (Banta, 1986; Pickens, 1982; Wade, 1989) as well as program data which can be used to assess the program. In addition there is an annual report on performance indicators which the legislature mandated in 1984, and which gives some quantitative measures of educational progress.

Some of the performance criteria that the legislature has mandated are similar to the criteria that are included in incentive funding.

The THEC program director for incentive funding, Dr. Robert Appleson, identified the following benefits:

"When something good happens in higher education in our state, we cannot automatically attribute it to performance funding. Yet there is every reason to believe that certain improvements were spurred significantly by this program which provided an additional $17 million to our campuses based on their performance last year.

- o A markedly higher percentage of our accreditable programs are accredited than was the case five years ago.
- o More of our licensed and certified fields have their students passing their professional examination at rates exceeding the norm.
- o There has been a steady rise in comp scores.

Beyond these quantitative indicators, there are some striking reforms afoot. A number of our campuses are using assessment to develop more effective instructional programs . . ." (Appleson, 1989).

The 1989 report on progress toward achievement of legislative goals (THEC, 1989) compares institutional scores in 1984 (the baseline year) with 1988. Since the incentive program in the 1979-83 period was rewarding the development of assessment systems, the 1984-88 period coincided with the greater emphasis on performance outcomes and therefore should be more revealing of the effects of the incentive program on student outcomes.

Several measures are shown in Table I. The main impression they provide is to little change in the measures over time. The average scores of entering undergraduate students increased significantly (about one-fifth of a standard deviation), and the average score of entering graduate students increased significantly at three of the seven institutions. The scores of graduating students on licensing exams either remained stable or declined slightly, and the scores of seniors on the ACT comp test were stable.

There is little evidence from these statistics to suggest that the incentives have caused major changes in the instructional programs of institutions. The institutions earned a smaller percentage of the incentive for their 1988 performance (which earns the 1990 allocation) than for their 1984 performance, but the shift in the weighting of the criteria in 1987 makes this

an improper comparison.

There are also some problems in attributing the changes to the effects of the incentive program. The overall funding for higher education in constant dollars per student in Tennessee increased 31 percent from 1980 to 1987, more than in any other southern state. Appropriations per student were 15% above the national average in 1987. It could be possible to attribute improvements to the increased level of funding, rather than to the incentive funding program.

One other measure of program effectiveness is satisfaction of recent graduates with their education. An alumni survey of the class of 1986 was mailed out to all university and two-year graduates. This is the only survey that has been completed using the same format for all institutions, so there is no comparison over time. A similar alumni survey instrument developed by ACT has been completed by a national sample of recent alumni. When compared with these national "norms" Tennessee universities' graduates generally gave their education higher marks (percent responding that the institution added "very much" to their ability in the specified area) than the national norms in leadership ability, writing ability, math ability, and understanding written information, and lower marks in understanding the arts, or understanding different philosophies and cultures.

Impact of Incentive Funding at the Campus Level

Martha Wade, a recent doctoral graduate from Vanderbilt, did case studies of three of the universities' response to incentive funding at the campus level. She hypothesized that campus leadership, campus culture and values, capacity to implement change, and the incentives at the departmental level would determine the response of the campus to the statewide initiative. She selected one campus (Tennessee Tech) which consistently earned a high percentage of the incentive

award, one campus (Middle Tennessee State) that was in the lower half of institutions in percent of awards earned, and one campus (UT Chattanooga) that showed improvement, but was still in the bottom half in percent of awards earned.

She visited the campuses in 1986 and did a focused interview with approximately 20 administrators and faculty at each campus, including the president, chief academic office, person in charge of the incentive funding program, deans, department chairs, chair of the faculty senate, and other faculty. There was a convergence of the interview responses so that a consistent picture emerged on each campus.

Questions asked of all respondents included, "Did the campus perceive a need to improve, did the assessment that was part of the instructional improvement program help them decide what and how to improve and did any changes (improvements) occur?" Campus leadership was important in determining the reaction to the program. At Tennessee Tech, the president was a strong supporter and advocate for the program, and participation by other administrators and faculty was seen as important. At Middle Tennessee, the president was much less involved, and the academic vice president and program coordinator provided the encouragement to departments to improve. At UT Chattanooga there had been three different academic vice presidents (one acting) in the preceding four years, and there wasn't clear central direction.

Despite the fact that the "instructional improvement program" was five years old, and was believed by administrators of all persuasions (both pro and con) to be "here to stay;" most of the faculty and most of the departments were uninvolved. Between a fourth and a third of the departments or schools at each university had been involved in some kind of instructional improvement activities during the preceding three years. Most common activities were curriculum and

course content changes, but they also included changes in advising.

Just as at the institutional level, leadership of the dean or department head was important in initiating and sustaining the improvement activity in a department. Where the faculty or department head were indifferent or opposed to the instructional improvement program, nothing was likely to happen.

Assessment activities provided some guidance for improvement activities. Alumni surveys, advice of an accrediting group or a visiting committee were seen as useful, the testing for general education outcomes (ACT comp) was not seen as helpful. Overall test scores in the field (GRE subject area tests for example) were not seen as helpful because a global average doesn't pinpoint curricular strengths or weaknesses.

The incentives for change did not come from the instructional improvement program; faculty, department heads and deans gave other reasons when asked why they initiated change. Some did not mention any extrinsic motivations. At UT Chattanooga, the faculty in arts and sciences felt the instructional improvement rewards for accreditation of the program had caused an internal reallocation of resources away from arts and sciences to those professional programs (like business) that were seeking accreditation. The arts and sciences faculty were trying to develop equivalent external review groups that could help them make the case for more resources for their program area.

The overall level of improvement activities revealed on these campuses could be just the normal amount of attention to course and curriculum change. At Tennessee Tech there was a campus-wide effort to improve general education outcomes measured by the Comp Test (writing for example), and four of the 26 schools and/or departments at Tennessee Tech were reported to have made major changes in courses or curriculum. At Middle Tennessee, the figures for major

changes were seven out of 34 and at UT Chattanooga, one out of 36. These figures are probably neither precise nor complete but they are of a magnitude that could be considered "normal" at most institutions. The faculty and deans involved did not think these changes were "caused by" the incentive program, although they agreed that the program had caused more discussion about the quality of education and the nature of general education. There were mixed signals about he capacity of the faculty to improve the scores that their institution was aking in general education and the major field. The measure of general lucation (the ACT comp) got the most criticism. Faculty didn't think their neral education program was oriented toward the skills that the comp assessed, l they were not motivated to change their content oriented approach to raise ir test scores.

One reason for the limited impact was that incentives to individual faculty epartments weren't provided to get them to initiate or continue improvement rities. At Tennessee Tech, the administration was obviously supportive of rogram, at Middle Tennessee the signals were mixed, and at UT Chattanooga rogram didn't get much attention during this period.

If Martha Wade had visited other campuses, such as UT Knoxville or Austin she would have seen a different pattern of campus action to improve iance. But those differences can be attributed to different leadership campus level. It is hard to demonstrate cause and effect relationships campus change and the instructional improvement program. Campus budgets been modified to provide incentives for individual faculty or department ent activities; there isn't a systematic incentive effect at the level ng and learning where it must occur if students are to be well educated. titutions have been able to maintain at a high level or improve their

percentages of the total incentive possible without actually demonstrating much change in the indicators cited above in Table I. They also haven't engaged faculty in improvement efforts at a level that is clearly above "normal." From these tentative conclusions you might infer that support for the program at the state and system level is weak, and that there might be a move to declare victory and absorb the program into the base budget. In 1989 there was substantial support for the importance of, and continuation of the incentive program among the state and system leadership in Tennessee.

Incentive Funding as Accountability

In the spring of 1989, Peter Ewell and Charles Lenth visited Tennessee as part of a multi-state study of the impact of state assessment activities. They interviewed legislators, members of THEC staff, and the two systems' staffs at the University of Tennessee and the Board of Regents. A consistent evaluation that the incentive funding program was valuable emerged from these visits. Ewell and Lenth were interested in how the highly structured Tennessee assessment activities that were tied to the budget were being used, and the extent to which they were providing information that the campuses could use for improvement.

The legislature thinks that performance funding is a good idea and helps to demonstrate accountability. As Chancellor Garland of the State Board of Regents (a former legislator) put it, the legislature wants to improve education, but they want a scorecard.

Several system and THEC respondents thought that Tennessee's willingness to provide substantial increases in funding in the 1984-89 period (during which the formula was fully funded for four years) was contingent on the kinds of measures of progress that are being supplied by the institutions. No one thought that the legislature would agree to have the performance funding dollars put into

the base budget. "They would just take the money away," was a consensus answer to the question, "Why don't you just fold the money into the budget?"

The two systems' staffs and THEC had similar positions in the last revision of the criteria for the performance assessment program. They agreed that the process criteria (like planning and accreditation) should have less emphasis (the planning criterion was dropped) and that outcomes should have more emphasis. They felt that "gaming" should be made more difficult. To increase the credibility of the performance assessment it needed to be tougher, with fewer schools earning 100 percent.

The Board of Regents staff rated the current campus support for the program as high among the community colleges, and as positive on two-thirds of the university campuses. Institutional support has grown as campus people have seen that more resources have come to them, and they are beginning to believe that these are "additional funds" that they wouldn't get otherwise. Support is much stronger among professional school faculty who have gotten more resources, and weakest among liberal arts faculty, who have gotten money for remedial education--which they don't like to do. The general education test has been the least satisfactory criterion, and general education is primarily a liberal arts faculty responsibility.

Summary

The state-level respondents believe that performance funding has become an integral part of the budget process, which demonstrates accountability to the legislature, and increases gubernatorial and legislative willingness to fund higher education. Its attractiveness to legislators justifies its continuation, whether or not it is designed to increase motivation of faculty and departments to improve education.

The three-year old assessment that Martha Wade made of the level of involvement of the faculty in improvement activities showed that the program hadn't had much effect on most faculty other than to increase discussion of assessment results.

While the situation may have changed some in the intervening three years, there would have to be a lot of improvement to demonstrate that the program was increasing faculty motivation to engage in improvement activities.

The new criterion adopted in 1987 for the campuses to demonstrate that they are taking corrective action on weaknesses revealed by the assessment may generate more systematic involvement of faculty and students in improvement activity, but whether the campus does anything new still depends primarily on campus leadership. As long as most of the institutions are earning 85 to 90 percent of the maximum award each year, they may not want to invest heavily in the difficult process of change. The evidence indicates that licensing scores and retention and completion rates are not easy to change. The alumni surveys also reveal an above average level of satisfaction among graduates with the quality of their undergraduate education. Tennessee universities have also been engaged in a number of other changes and improvement activities (centers of excellence, remedial and developmental programs) which take up faculty and administration time and effort, so the capacity may be limited to make further changes in student learning.

From the faculty or student perspective, the rewards for making improvement in their program are problematic, while the costs are likely to be substantial. The program hasn't lead to sufficient rewards at the faculty level on most campuses. The program also hasn't provided the kind of assessment evidence that will be of most help in planning and conducting an ongoing improvement effort.

Test scores, which provide quantitative and summative indications don't give faculty much guidance. Tennessee has enough assessment data to satisfy accountability expectations, but not enough to guide or evaluate plans for improvement.

Despite these weaknesses of the program in motivating improvement at the faculty level, the program is firmly entrenched as a part of the new budgetary accountability for results, and the challenge to Tennessee is going to be to make it actually serve the purposes for which it was intended.

TABLE I

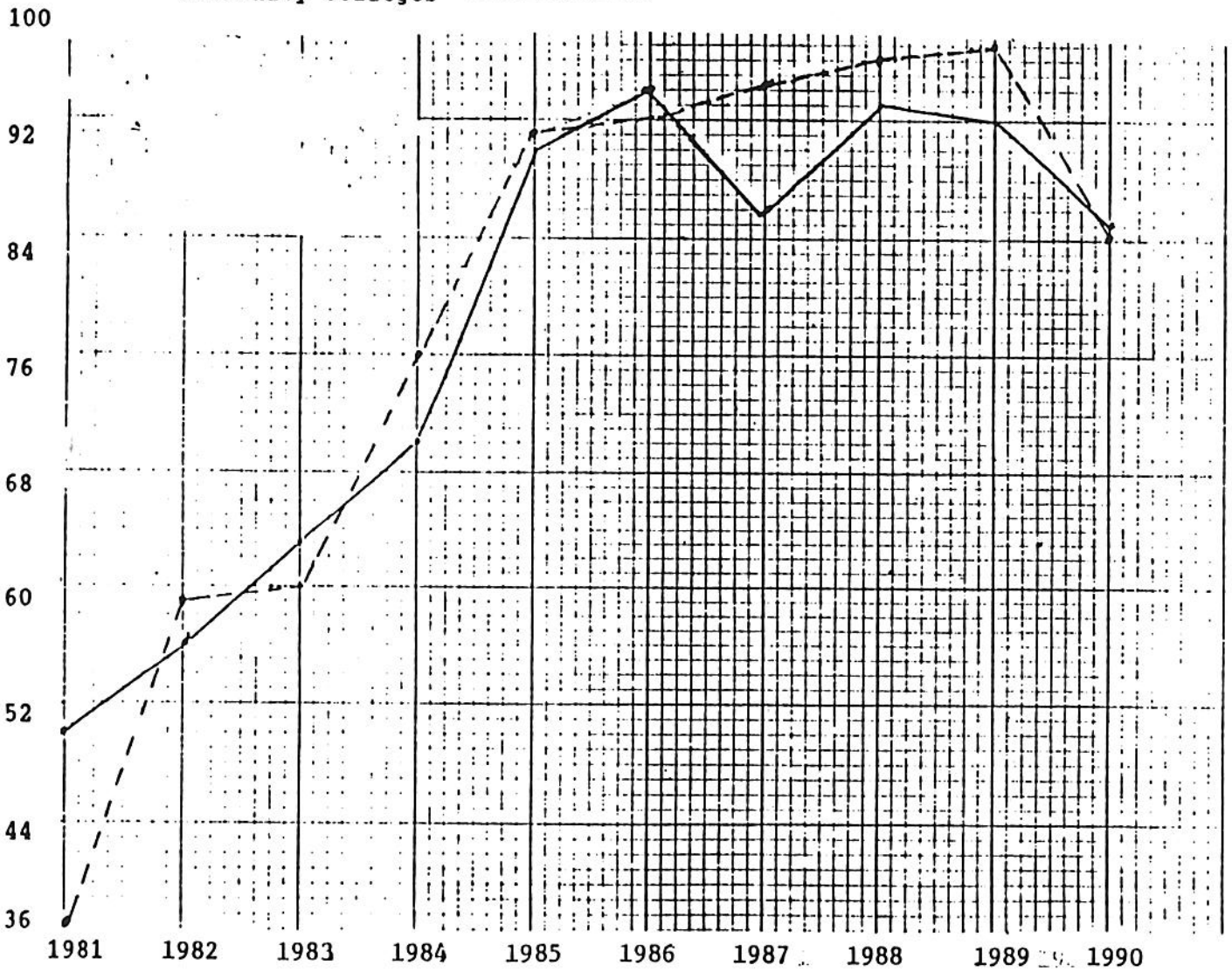
Tennessee Progress on Legislative Goals 1984-88
(Universities)

Goal		1984	1988
1.	Percent of entering full-time freshmen who graduate with a baccalaureate degree in six years (year of graduation)	40.4	40.9
2.	Average NTE scores of students in Teacher Preparation Programs	1,973	1,988
3.	Average entering test scores (SAT converted to ACT equivalent)	18.4	19.5
4.	Average scores of Graduating Seniors (samples) on ACT Comp.	184.8	185.2
5.	Percent of Student Passing Licensing exam on first attempt		
	Engineering	63.1	63.4
	Nursing	89.7	84.1
	Law	79.9	78.7
	Medicine Part I	89.5	83.5
	Part II	99.6	99.5
6.	Mean GRE Scores of Students entering graduate school		
	Austin Peay State University	856	939
	East Tenn. State University	941	1,002
	Memphis State University	1,045	1,037
	Middle Tennessee State University	946	951
	Tennessee State University	955	1,038
	Tennessee Tech University	1,011	1,044
	Univeristy of Tennessee, Knoxville	1,029	1,066

Scores not shown for less than 25 students. Scores for some schools based on less than 50 percent of student admitted.

Figure One

Average unweighted percentage of funds
that could have been earned FY1981-90
Universities _____
Community Colleges ----------



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