This paper explores the issue of "state policy" and the assessment process and how it can be applied to improving the teaching and learning process in undergraduate education. Three distinct policy questions are addressed: (1) how can assessment focus attention on what college graduates in a democratic society should know and be able to do? (2) what assessment information is useful for making sure that the curriculum provides the necessary skills and content? and (3) how can assessment support departments and disciplines in assuming collective responsibility for the outcomes of college curricula? Next, assessment and its impact on improving teaching is discussed. This discussion asks how assessment can help to inform the teaching and learning process within the classroom, how assessment can be used in designing state policies that support good college teaching, and how assessment can be linked to the institutional reward structure to support good teaching. Finally, the paper examines resource allocation in the assessment process in order to make assessments viable policy tools for improvement. This discussion asks how assessment can be related to the determination of resource needs, how assessment can help to inform the allocation of resources, and how assessment can be used to examine and increase the "return on investment" of public resources in higher education.

(GLR)
STATE POLICY ON ASSESSMENT: THE LINKAGE TO LEARNING
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INTRODUCTION

The rhetoric of assessment in higher education, regardless of its source, has always been the improvement of teaching and learning. For those concerned with assessment within the academy, this motive is a given. Absent a visible connection to teaching and learning, faculty argue, there is little point to the exercise. For the most part, state policy makers agree. Rather than narrow "accountability," they see in assessment a way to redirect higher education's attention toward critical societal challenges for the future. Above all, they see in assessment a means to induce faculty at colleges and universities to take active responsibility for student learning, an obligation which many feel, over the years, has been badly neglected.

How to actually use state policy to achieve these ends, however, remains elusive. Partly this is because the entities to be linked "state policy" and the "improvement of teaching and learning" are themselves ill specified. Partly it is because the causal chain between what a legislature enacts and what a classroom teacher does is dauntingly complex. We intend this seminar to explore both murky areas in a manner that both can promote future dialogue and that can provide some immediate guidance to those at the state level who will provide the immediate policy environment within which we all must function. What follows are brief discussions of three related policy areas. Within each is a series of questions that we are asking all participants to address, and that we hope will provide a framework for our deliberations. Like those posed in assessment itself, we do not expect these questions (or their answers) to be definitive; they have done their job if only our thinking is clarified.
ASSESSMENT AND THE CURRICULUM

Assessment and undergraduate curricular reform are intimately related, for the language of assessment itself implies a curricular agenda. "Assessment" first requires some explicit standards of performance; curricula that contain none cannot be assessed. More importantly, "assessment" implies an instructional design that is both coherent and interconnected. Even posing assessment as a required activity will inevitably raise important curricular issues. As a result, both institutional and state proponents of assessment are apt particularly to emphasize its role in promoting curricular change; indeed, curricular change in itself is often seen as convincing evidence that the process is "working." To inform assessment's impact on the curriculum, we believe, three distinct policy questions must be addressed:

1. How can assessment focus attention on what we expect college graduates in a democratic society to know and be able to do?

Though frequently seen as a prerequisite for assessment, the development of more explicit goals for teaching has proven to be one of its most ubiquitous actual products. And policy makers repeatedly claim that clear goals are badly needed. Part of the problem here is that most institutions cannot as yet provide answers to the question that policy makers most want to know: what is the outcome of the curriculum as a whole? This question is important, because policy makers do not see undergraduate education as an end in itself -- a "public service" to be provided -- but rather as a critical investment in the future. But many issues spring from this simple demand.

First, what ought curricular goals to look like? Is it meaningful, for example, to formulate this question for an entire state, such as New Jersey has done with its "General Intellectual Skills" (GIS) examination (which covers such areas as "gathering, analyzing, and presenting information"), or as several states have done with respect to basic skills? If so, should goals be couched as minimum standards that all students should demonstrably meet, as "central tendencies" for college graduates as a body, or as aspirational challenges to guide future development? This is a central policy dilemma in many states: "mandating adequacy" through minimum standards can potentially narrow curriculum and leave more selective institutions unaffected, as has happened for the most part in Florida; "challenging excellence" through higher standards on the other hand, can raise issues of equity that often entail substantial political costs.

A second issue is which goals, if any, should be held in common. Is it appropriate for state policy to articulate for all institutions the actual kinds of knowledge and skills required as, for example, is suggested by Virginia's "Curriculum for the 21st Century?" Or ought state policy to be confined to requiring institutions to address goals in common areas -- for example general education, student satisfaction, or major field achievement? Those states, such as Colorado, which have followed the latter course have found remarkable overlap in the actual content of institutional goal statements, once developed, though each was developed "independently."
Rather than mandating uniform goal statements, this finding suggests a strategy of allowing them to emerge gradually.

A final issue concerns who should be involved in the goal-setting process. Structuring a statewide dialogue about desirable outcomes, for most states, remains largely unknown territory. One alternative is to attack the problem by involving business and industry leaders directly with academics in the goal-setting process, as was practiced by the College Outcomes Evaluation Program (COEP) in New Jersey. Another, as in Colorado, is to require institutions to provide evidence that their own assessment activities include efforts to determine the needs and perceptions of the various "communities" that they are intended to serve.

2. What assessment information is useful for making sure that the curriculum provides the necessary skills and content?

In order to be useful for guiding improvement, information derived from assessment must meet several conditions. First, it must address multiple dimensions of student capacity and performance; capacities such as "critical thinking," for example, are notoriously resistant to useful general measures. Secondly, it must be provided in a form that is sufficiently disaggregated to guide intervention; overall summaries of institutional performance will often mask substantial and important variations across departments and programs, or among different types of students. Finally, it must address instructional processes as well as obtained outcomes; if institutions know nothing about the actual delivery of instruction in the classroom, or about the choices that students are making about what classes to take, it is next to impossible to know what to "fix" if outcomes deficiencies are detected. As a result, the most useful assessment information for guiding curriculum renewal is often the most difficult to meaningfully aggregate and summarize.

And as in the case of goals, much turns on what is considered "the necessary skills and content." If the resolution to this question is collective, uniform performance information such as that provided by basic skills examinations in Florida or New Jersey may provide an appropriate answer; both are being used to direct statewide attention to needed changes in curriculum -- most notably in the teaching of mathematics where important changes and improvements in performance have in fact occurred. But if the resolution to this question is local, "accountability" may rest largely upon a demonstration that obtained information has been effectively used to address curricular issues. In the latter case, state policies that encourage and recognize information use rather than information reporting may be most needed.

3. How can assessment support departments and disciplines in assuming collective responsibility for the outcomes of college curricula?

A critical condition for curricular reform is for faculty in diverse departments and disciplines to recognize their responsibility for undergraduate education as a whole. Current organizational and reward structures in most colleges and universities are
strongly at odds with this condition. One virtue of assessment is that it raises the question of collective responsibility in concrete ways that are difficult to ignore.

The most visible place where issues of "joint product" arise is in the assessment of general education, and it is no coincidence that assessment in this arena has proven the most difficult for institutions to actually implement. A major policy dilemma here is illustrated by the common decision to require institutions to report on the assessment of "general education" as a separate enterprise, when arguably the kinds of outcomes claimed for "general education" are coincident with the college experience as a whole. But by not calling explicit attention to general education, state assessment policies risk encouraging an institutional response that may ignore collective products altogether.

Additional "collective responsibilities" cut across institutional boundaries. In many state university systems, as many as a third of the baccalaureate degrees granted in a given year are "joint products" of university and community college instruction. Yet curricular articulation between two-year and four-year institutions remains a significant challenge. Here a primary contribution of assessment policy can be to formulate the question of "articulation" on different grounds. Instead of matching individual courses content-for-content, the policy question becomes, "what particular areas of knowledge and skill are required of students as a prerequisite for upper-division work?" One accomplishment of CLAST in Florida has been to address this question in rudimentary form. More sophisticated examples include attempts to define core transfer competencies among community colleges in Texas and Washington.
ASSESSMENT AND TEACHING

If linkages between state policy and college curriculum are indirect, those between policy and teaching practice are looser still. Yet a significant development in the practice of assessment in the last few years has been an increased emphasis on improved pedagogy. In contrast to large-scale culminating examinations, assessment practitioners are increasingly urging faculty to "embed" assessment in regular coursework and to undertake a systematic program of "classroom research" to determine what teaching strategies are working and how students are actually experiencing the classroom.

Emerging campus experience suggests that techniques such as these are significantly more likely to yield faculty engagement and positive change; but they at first appear to be far from the influence of state policy. Narrowing this distance, we believe, requires attention to three distinct policy questions:

1. **How can assessment help to inform the teaching and learning process within the classroom?**

   Assessment processes such as "classroom research" are notoriously difficult to mandate. Like the familiar "course evaluation" processes required at many institutions, success depends upon the perceived utility of the process to individual instructors. **Requiring** course evaluation, research has shown, has in itself had remarkably little impact on classroom behavior. As with the curriculum, therefore, the greatest impact of state policy in this area may be symbolic: it signals clearly that faculty must **take responsibility** for student learning rather than, as many believe, simply providing an arena for it to happen.

   State assessment policies may nevertheless profoundly influence classroom behavior in at least two ways. First, they may help to determine who is actually in a particular college classroom. Coupling basic skills assessment with initial student placement and advisement, as is done in Tennessee and New Jersey, seems reliably to increase a student's chances of success, though it may also increase the amount of time needed to attain a degree. But mandatory placement can also raise significant equity questions -- particularly if test bias becomes an issue, or if it is difficult to show a significant relationship between test performance and later performance in the curriculum.

   State assessment policy can also focus greater institutional attention upon classroom process. Are students engaging in "active learning" or "group study," as advocated by such sources as the recently-issued Wingspread "Seven Principles of Good Practice in Undergraduate Education"? Are they engaged in learning on their own, in parallel with classroom instruction? Are they choosing courses in a manner that allows them to avoid key learning experiences, such as library research, interaction with a computer, or a sustained piece of writing or analysis? Some state assessment approaches (most recently, the "Q-7" quality indicators project of the Minnesota State University System) are now attempting to address such questions.
2. **How can assessment be used in designing state policies that support good college teaching?**

Addressing this question suggests an important policy linkage between assessment and faculty development. Early experiments in statewide collegiate skills assessment such as the New Jersey GIS Examination, suggest that students may systematically lack contextual knowledge (a solid grasp of physical geography, for example) that their instructors may take for granted in instructional delivery. Students may also profoundly misunderstand what is really being sought in a typical intellectual task (in the GIS, for instance, the term "essay" had to be explicitly defined before meaningful responses were obtained). Both kinds of insights can be particularly helpful in structuring faculty development.

Considerable experience has also shown that designing assessment procedures can itself be a significant faculty development activity. Most college and university teaching faculty have had little or no explicit training in how to write good examination questions or how to explicitly recognize and foster specific aspects of student growth and development. To the extent that state policies encourage this kind of faculty engagement, they are also pursuing faculty development.

3. **How can assessment be linked to the institutional reward structure to support good teaching?**

A major intent of state policy on assessment is deceptively simple: to shift a greater proportion of scarce institutional attention toward undergraduate education. Permanent shifts of attention, however, are generally accomplished only in the context of an underlying shift in incentives. So long as faculty perceive that their own reward structures to be predominantly research-based and discipline-oriented, there is little possibility of widespread attention to good teaching.

But altering faculty reward structures on the basis of an activity as controversial as assessment poses critical policy challenges. First, in examining the incentive structure surrounding teaching, it is important to distinguish individual payoffs from collective investments. Coupling the results of assessment to individual faculty rewards -- either in the promotion and tenure system or in the form of additional dollar incentives for "exemplary" performance -- risks incurring faculty behaviors, such as "teaching to the test," that are directly counterproductive to improved teaching. More importantly, coupling assessment with individual rewards may foster a level of competition among faculty that is directly antithetical to their assuming collective responsibility for curricular outcomes. A second issue concerns the degree to which "assessment" is seen as an additional, fundable, faculty responsibility, distinct from instruction itself. Not paying for the incurred costs of assessment, on the one hand, risks sending the signal that the activity is seen as of low priority. Negotiating a full-cost "rate scale" for faculty participation in assessment, as many collective bargaining units now advocate, risks stifling the kind of creativity needed for a meaningful program.
Both issues highlight the importance of taking a broad, systemic view of the reward structure for teaching. At bottom, institutional experience shows that faculty will become involved in assessment primarily because they feel that it enables them to do a better job as teachers, and because they can, in fact, take collective pride in doing so. To the extent that resources are involved, the key may be to clearly channel resources toward addressing concrete instructional problems that faculty identify, rather than to provide individual dollar rewards.
ASSESSMENT AND RESOURCE NEEDS

In contrast to curriculum and teaching practice, resource allocation has always been a premier domain of state higher education policy. As a result, when thinking about ways to harness assessment as a policy tool for improvement, legislators and state board members can be quick to seek concrete linkages to allocation. Varieties of "performance funding" -- often proposed, but to date actually implemented only in Tennessee -- generally lead the list of proposed innovations. But the realities of linking assessment results directly to resource issues can in practice prove complex. At minimum, we believe, the following questions must be addressed:

1. How can assessment be related to the determination of resource needs?

To address this question coherently, "resource needs" must first be distinguished for institutions and for the system as a whole. In the latter, assessment results are potentially powerful tools for making an effective case about overall need. In both Florida and New Jersey, for example, lower-than-expected basic skills results have bolstered the case for greater investment in remedial and basic skills instruction, particularly among community colleges. But demonstrating need on the basis of visible shortfalls in performance can prove a risky long-term strategy, particularly if the reasons for shortfall are persistent and systemic. Indeed, higher education leaders have been historically sensitive about sharing "bad news" explicitly with state policy makers, even if it can potentially be used to make a case for increased investment.

At the institutional level, the use of assessment information to make the case for need encounters a similar dilemma. But here, state policy can in principle be more consistent. Funding preference can be given, for example, to institutional special budget requests that make visible and effective use of locally-collected assessment information as has been the case, for example, in New Jersey's "Governor's Challenge Grant" or in the Colorado "Centers of Excellence" program. The key to success in such programs is that they foster a healthy competition among institutions while at the same time linking new investments clearly to desired state purposes.

2. How can assessment help to inform the allocation of resources?

The nature of the link between assessment and resource allocation is probably the most important single assessment policy question at the state level. If there is no link, assessment cannot in the long run be taken seriously by faculty and institutional administrators. But if the link is inconsistent, unclear, or even too directive, the chances of meaningful impact on teaching and learning can be equally reduced.

Most states, for better or worse, have chosen not to link assessment results directly to resources. Partly, this is a tactical decision, based on the need to initiate what is known will be controversial process in as non-threatening a manner as possible. Where such linkages are present, they tend to be both indirect and tied to the
process rather than the results of assessment. (Both Virginia and New Jersey, for example, have invested heavily in marginal allocations to support assessment at the institutional level, as did Florida when CLAST was implemented several years ago.) When pressed, however, state leaders say they hope to make more visible use of assessment results through such processes as program review and improvement, faculty development, and additional marginal incentive grant programs.

Effectively linking assessment results to institutional resource allocation involves resolution of at least three major policy dilemmas. First, should the philosophy of allocation be driven by rewarding performance or by addressing need? The classic model of "performance funding" ties positive assessment results to increased allocation. Because it appears to provide incentives for improvement, performance funding has inherent appeal to legislators and state boards. In practice, however, it may direct investment away from where it is most needed, and may cause institutions to give undue attention to narrow conceptions of performance. Directing resources toward detected problems, on the other hand, can tend to obscure real excellence and innovation. Both situations can be exacerbated when, as in Colorado, resource consequences are negative in the form of a budget penalty.

A second dilemma involves the level of resources at issue. For good reasons, most states continue to allocate resources to institutions on the basis of imputed cost -- either through formula or through incremental adjustments to base. What is generally at stake, therefore, are "marginal" investments of from 2% to 10% of available resources, allocated by a special process. But the higher the stakes, the greater the dilemma. If little is seen to be at stake, as in states like Missouri or Illinois, institutions may pay little attention. If much is at stake, as in Tennessee, Colorado, or Virginia, the incentive may be to take few risks, to report only good news, and to see assessment primarily as an administrator's responsibility. In Tennessee, for example, one unintended consequence of performance funding is an institutional perception that assessment is "too important to be left to the faculty."

A final dilemma concerns the actual mechanism to be used to allocate funds. On the one hand, equity demands the consistent application of clear criteria, lest institutions rightly charge that assessment-based resource allocations are made capriciously. But, as in Tennessee, this may drive policy inexorably toward narrow quantitative criteria that can be "unambiguously" applied. The result may be a system little different in function from a traditional enrollment-driven formula. The increasing use of "peer institutions" in a wide range of state budgetary mechanisms represents one attempt to get around this problem. Lack of clarity in the allocation process, on the other hand, can render it sufficiently political that the real ends of improvement become obscure.

3. How can assessment be used to examine and increase the "return on investment" of public resources in higher education?

An undoubted stimulus for assessment is a growing demand for evidence of "return on investment." Legislators and state board members are increasingly impatient
with claims that the complexity of higher education renders infeasible any attempt to gather evidence of its effectiveness. As a result, many have been quick to press for assessment "solutions" that attempt to provide such evidence promptly and simply. Many in the academy, in turn, have been quick to condemn such motives as inconsistent with the real goal of assessment: improving teaching and learning.

Before immediately characterizing these motives as antithetical, it is important to recognize the reality of the forces that lie behind them. One is a real decline in public credibility for higher education as an enterprise; as costs have grown so has the public’s conviction that colleges and universities are not as focused on their own and society’s needs as they once were. At the same time, political champions of higher education increasingly believe that they need better evidence to "sell" needed increases to their doubting colleagues. More and more, they speak of such evidence in corporate language, calling for the equivalent of "shareholders' reports" or "annual earnings statements." Ironically, when pressed, their motives resemble those of the academy: they want assessment processes that are real, engaging, complex, and that have the potential to actually have an impact on undergraduate classrooms. But they must also meet the demands of a constituency that wants to keep things straightforward, and that is growing impatient about what is seen as unresponsiveness.

Significant gaps between the language and timeframes of the academic and political worlds raise additional policy issues. If "improvement" is indeed a long-term enterprise, what can the public be told in the short run? Once it is known that "assessment" is occurring, as in New Jersey, public pressures for early disclosure become enormous. Should preliminary results be disclosed, no matter how uncertain? Or, as in South Dakota, should institutions be allowed to protect the confidentiality of their individual results for a limited period while remedial actions are taken? Or should the emphasis of reporting be placed upon communicating institutional actions taken in response to assessment, as in Virginia or Colorado? And if so, is it necessary to report results as well as remedies, if only to demonstrate that a credible process is in fact in place? Finally, who are the primary constituencies for reporting? Should they be legislators and public officials primarily, who can at least minimally be expected to know the policy contexts within which assessment information belongs, or should reporting be extended to prospective students and employers of graduates, as has been posed in California, and as is currently called for in new "track record disclosure" rules for federally-supported occupational and technical programs?

At bottom, of course, evidence of "return on investment" is provided by improvement itself. State policies which can in fact foster improvement in the long run, will at the same time achieve "accountability" as a by-product.