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Long-Term Effects of Performance Funding: A Case Study of 20 Years at Tennessee Technological University

Jeffrey Lorber
University of Tennessee - Knoxville

To the Graduate Council:

I am submitting herewith a dissertation written by Jeffrey Lorber entitled "Long-Term Effects of Performance Funding: A Case Study of 20 Years at Tennessee Technological University." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Education.

E. Grady Bogue, Major Professor

We have read this dissertation and recommend its acceptance:

Jeffrey P. Aper, John W. Prados, William T. Snyder

Accepted for the Council:
Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Dissertation Chair

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Interim Vice Provost and
Dean of the Graduate School

LONG-TERM EFFECTS OF PERFORMANCE FUNDING: A CASE STUDY OF 20 YEARS AT TENNESSEE TECHNOLOGICAL UNIVERSITY

A Dissertation
Presented for the
Doctor of Education Degree
The University of Tennessee, Knoxville

Jeffrey Lorber
May 2001

DEDICATION

This dissertation is dedicated to my wife

Sandy Lorber

for her patience and understanding,

to our son Jack,

and to the many educators who,

throughout my life,

have encouraged my academic progress.

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There are many individuals at the University of Tennessee to whom I owe debts of gratitude. The faculty in the Educational Administration and Policy Studies program are accomplished individuals from whom I learned a great deal more than they will likely ever realize as they challenged my intellectual weaknesses.

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ABSTRACT

In this study, the principal investigator sought to determine what effect, if any, that performance funding has had on academic decision making at a public higher education institution in Tennessee. In conducting a case study, the principal investigator interviewed 18 current and former administrators and faculty members to determine attitudes and perceptions about performance funding at the institution. An extensive review of campus documents provided additional information for the study. Findings of the study focused on institutional policy changes since the performance funding policy was implemented, strengths and weaknesses of the policy, and recommendations for future actions relative to the policy.

General findings indicate that few academic policy decisions occur as a direct result of the performance funding policy, but it is also apparent that the policy significantly influences activities related to preparation for accreditation and peer review visits. The policy also helps: 1) place increasing emphasis on outcomes and value-added components of a college education, 2) identify areas of weakness, and 3) provide additional operational money that may have not otherwise been available. Alternately, the performance funding policy accentuates: 1) communication blocks that exist between administration and academic departments, 2) dissension about how money earned from performance funding is utilized, and 3) the realization that performance funding has increasingly become a paperwork exercise for administrators rather than a process that involves the entire campus community.

PREFACE

Early in his doctoral study at the University of Tennessee, the author of this study became aware of the concept of performance funding, a means utilized in some states to reward public institutions of higher education for demonstrations of improved student academic outcomes. A research opportunity arose relative to conducting a case study in conjunction with several other similar, simultaneous research efforts to determine the effectiveness of performance funding at selected public higher education institutions in the State of Tennessee.

The principal investigator chose to conduct his study at Tennessee Technological University in Cookeville, Tennessee. That institution is often perceived as being unique compared to other colleges and universities; it has many characteristics of a small, residential campus, but it also has significant academic programs in professional fields such as engineering and business. Also, Tennessee Technological University has performed consistently well on criteria-related standards of performance funding compared to other institutions in Tennessee and was very active in implementing the performance funding policy when it was initiated in the 1970s.

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CHAPTER ONE

INTRODUCTION

Frequent violations of public trust have made many people suspicious of virtually all organizations, including those once deemed beyond reproach. Even public colleges and universities are not above investigation and are being held increasingly accountable by legislators and taxpayers. Until the latter part of the 20th century, public higher education had enjoyed extensive freedom from formalized scrutiny by outside constituencies such as federal and state governments, taxpayers, corporations and foundations, alumni, students, and parents of students.

During the 20th century, most public institutions positioned themselves for annual state appropriations based on enrollments and generally went about business as usual. Higher education did not experience a great amount of scrutiny by outsiders as it was revered as being "above it all" in ivory towers. While higher education is expected to serve as the standard bearer for honesty and decorum in society, one only has to regularly read *The Chronicle of Higher Education* to learn that some college leaders and institutions have violated the public's trust through well-publicized cases of ethically and morally inappropriate, if not illegal, behavior. Therefore, one should not be surprised that the public, including state legislatures, demands to know just how its financial resources are being utilized by public entities.

For more than 20 years, society has sought to help public colleges and universities meet the educational needs of an ever-changing world, requiring college students and graduates with flexible skills to adjust accordingly once they are in the workplace.

With increasingly tight budgets in some states, today virtually no organization, including public institutions of higher education, is exempt from accountability as more organizations than ever are vying for increasingly monitored resource dollars. Accountability in higher education seeks to promote the ideal that those institutions effectively demonstrating improvement in learning outcomes will ultimately be rewarded for "doing good business."

Performance funding is one of many instruments and expressions by which higher education has attempted to address the issue of accountability. As practiced in most states utilizing the policy, performance funding attempts to link small, yet significant portions of state appropriations for public higher education institutions to outcomes-related goals.

The State of Tennessee is arguably recognized as a national leader in performance funding in higher education. In Tennessee, the Performance Funding Project was formally initiated in the late 1970s to encourage improvements in quality at higher education institutions by allocating rewards for colleges and universities meeting and exceeding predetermined goals and objectives. All public colleges and universities in Tennessee participate in performance funding activities.

Tennessee was a pioneer state in utilizing this form of policy, being the first to attempt such a venture. This activity was initiated and led by the higher education community without a mandate from the state legislature. The determination of how schools receive funding includes active participation of numerous stakeholders affected by the policy. Tennessee's gradually increasing emphasis on performance funding as a significant, if not dominant, means of funding higher education has survived more than

two decades of extensive scrutiny and appears to successfully address many issues relative to improvement in educational outcomes and accountability to stakeholders.

Background

Assessment, Accountability, Fairness, and Equity in State Funding

American higher education is a large financial enterprise—revenues and expenditures total almost $200 billion annually, more than two-thirds of which is involved with the public sector (Bogue & Aper, 2000). Not surprisingly then, assessment and accountability have been topics of important discussion and action in higher education the past few decades (Astin, 1993; Bogue, 1994; Bogue & Aper, 2000; Ewell, 1986). Both Astin (1993) and Pickens (1982) indicate that numerous efforts have been undertaken to define and organize outcomes of education.

Bogue (1999a) emphasizes that no accountability system for higher education can be successful if it does not have the active endorsement of political officers and institutional faculty and staff. Accountability of higher education institutions must be achieved, according to Bogue (1999a), through a combination of several activities: continuing use of peer review such as accreditation with stronger governance, active auditing procedures, enhanced dissemination of public information about institutional performance, and involvement of board members/trustees in review activities.

Long-time administrators and faculty members often comment that, several decades ago, state funding for public higher education was greatly dependent on the lobbying skills of a respective campus leaders. Since that time, state funding decisions have greatly evolved. States have increasingly sought to determine new and different ways allocate limited resources to institutions in a fair, equitable manner intended to

assist colleges and universities in helping to educate students to become contributing members of society. Methods often used to allocate funds to public institutions include, but are not limited to: per student funding, formula funding, peer funding within formula funding, and performance funding.

Numerous studies analyzing higher education funding and budgetary processes have occurred since the mid-1970s (Folger, 1980). According to Marks and Caruthers (1999), some higher education authorities say funding decisions should be based on two cost factors—services provided and numbers served, while others say college and university funding should be based on performance.

The emphasis of traditional formula funding has largely been based on enrollments and on how much activity is undertaken in providing educational services such as credits and degrees, not on how well students are ultimately served (Burke & Serban, 1998b; Pickens, 1982). Traditional formula funding has been utilized by many states to address reasonable needs of higher education, promote equitable allocation of state funds, recognize diversity among campus missions, and accomplish statewide goals (Bogue & Aper, 2000).

According to Millard (1980), traditional formula funding, which is based on previous years' budgets being increased, maintained, or reduced, has a couple of limitations in that it does not necessarily reflect program and planning activities and it can perpetuate inequities. Other criticisms of traditional appropriations formulae are that they: 1) do not account for institutional diversity of mission (uniqueness); 2) provide no incentive for improved instructional performance; 3) encourage displacement of institutional goals; and 4) serve institutions well when enrollments are growing, but do

not help as much when enrollments are declining (Bogue & Aper, 2000; Bogue & Troutt, 1980; Dumont, 1980).

Various forms of performance budgeting and performance funding have been increasingly utilized by some state higher education systems in response to perceived concerns with traditional formula funding (Bogue & Troutt, 1980; Burke, Modarresi, & Serban, 1999; Burke & Serban, 1998b). Much of Millard's (1980) research activities focus on budget approaches and related issues such as planning, programming, and budgeting systems (PPBS); performance budgeting; and the development of accountability systems.

As its name implies, PPBS was devised as a process for uniting budgeting and planning activities to ensure implementation but, where implemented, it has become parallel to traditional budgeting approaches rather than supplementary (Millard, 1980). PPBS originated at the federal level and has been adopted or adapted in various states with mixed results (Millard, 1980).

Performance funding requires active program and policy review by many stakeholders to determine improvements in learning outcomes. Folger (1980) has postulated that formal program review provides a strong basis for the reallocation of resources (faculty and dollars) by states and for increasing the quality of educational opportunities and eliminating programs deemed to be marginal or substandard.

Performance funding ties specific monetary allocations to institutional results based largely on indicators such as the number of graduates, the number of continuing education courses, and retention/graduation rates (Bogue & Aper, 2000; Burke, Modarresi, & Serban, 1999; Burke & Serban, 1997; Miller, 1980). Marks and Caruthers

(1999) state that performance funding allows colleges and universities to decide how to spend the funding they earn. Bogue and Aper (2000) stress that performance funding employs state fiscal policy as an instrument to serve state goals such as enhanced quality and accountability of learning outcomes in higher education.

Generally, performance funding requires the identification of indicators to be utilized by which funds can be allocated. According to Borden and Bottrill (1994), whoever determines the performance indicators also determines the activities and direction of the system, institution, or program. They also stress that performance indicators must present information about a variety of aspects related to higher education: inputs, process or productivity, intermediate outputs, and final outputs. Similarly, Banta and Borden (1994) claim performance indicators derive significance from their ability to link outcomes both with purposes and with processes.

Despite the intent of performance funding policies to recognize and reward the achievement of desired educational outcomes, perceived liabilities exist. Astin (1993), for example, indicates that performance-based funding approaches are deficient in that they do not address improvement needs of entire educational systems and thus do not encourage cooperation and collaboration among institutions. Ramsden (1998) states that while performance-based funding schemes exist for research and influence institutional behavior, links between performance in teaching at universities and funding are either weak or non-existent.

Performance Funding in Tennessee

Tennessee is recognized as the first state to formally utilize a performance criterion in funding higher education (Banta & Fisher, 1984, 1986; Bogue & Aper, 2000).

The purpose of Tennessee's Performance Funding Project was to explore the feasibility of allocating a portion of state funds based on performance criterion in response to public concerns about enrollment-driven funding formulas and assessment (Banta & Fisher, 1984; Bogue & Troutt, 1980; Dumont, 1980; Pickens, 1982). The undertaking of the pilot project venture gave credence to the Performance Funding Project's motto: Acting on the possible while awaiting perfection (Bogue & Troutt, 1980).

A five-year, $500,000 development effort funded by the Ford Foundation, the Fund for the Improvement of Higher Education, the Kellogg Foundation, and an anonymous foundation based in Tennessee preceded the program's formal inception (Bogue & Troutt, 1978, 1980; Dumont, 1980; Fry, 1977; Miller, 1980). The Performance Funding Project in Tennessee involved the Tennessee Higher Education Commission (THEC), the governing boards of both public systems of higher education (the Tennessee Board of Regents and the University of Tennessee System), and campus representatives (Bogue & Troutt, 1977a; Dumont, 1980).

As the Performance Funding Project was being prepared for implementation, several pilot projects were designed to explore the development of institutional goals related to instructional impact and to identify and test indicators related to those goals (Bogue & Troutt, 1977a). A 1979 report issued by the THEC stating that the value of the pilots was the testing of a process that considered:

1. the willingness of campus personnel to involve themselves in performance assessment;
2. the ability of a campus to express its own educational uniqueness;

3. the ability of campus leaders to involve faculty and to elevate concern for performance assessment;
4. the benefits of performance data to the faculty; and
5. the potential for developing a partnership between the State and the institutions (Bogue & Troutt, 1979, p. 38).

Following the extensive pilot activity, Tennessee's initial performance funding program, the Instructional Evaluation Schedule, was implemented in 1979 (Banta & Fisher, 1989). Periodic evaluative reviews of Tennessee's performance funding policy, now occurring every five years, have precipitated frequent changes to the policy since its inception.

Theoretical/Conceptual Framework

Creswell (1994) states that one does not begin with a theory to test or verify in a qualitative study; instead, a theory may emerge during data collection and analysis or be utilized late in the research process as a basis for comparison with other theories. Merriam (1998, p. 188) agrees with Creswell in borrowing from LeCompte, Preissle, and Tesch, who defined theorizing as "the cognitive process of discovering or manipulating abstract categories and the relationships among those categories."

Miles and Huberman are quoted in Creswell (1994, p. 97): "A conceptual framework explains, either graphically or in narrative form, the main dimensions to be studied—the key factors, or variables—and the presumed relationships among them... (Frameworks) can be rudimentary or elaborate, theory-driven or commonsensical, descriptive or causal."

According to Rudestam and Newton (1992), theories and conceptual frameworks are developed to account for or describe abstract phenomena that occur under similar conditions and make sense of similarities and differences between observations. Tuckman (1988) points out that the researcher's goal is to make findings part of a comprehensive body of theory that either already exists or is to be generated by the study.

Worthen, Sanders, and Fitzpatrick (1997) borrow from Scriven in defining evaluation which is judging the merit or worth of something. Kosekoff and Fink (1982) define evaluation as a set of procedures to appraise a program's merit and to provide information about it's goals, expectations, activities, outcomes, impact, and costs; evaluations are conducted because groups or individuals want to know about a program's progress and/or effectiveness. According to Thomas (1994), the goal of any outcome evaluation is to demonstrate causality—whether a program has caused desired changes. Thomas (1994) also states that program evaluation is a goals-based process; that is, programs are assessed against the goals they were designed to achieve.

Newcomer (1997), Tyler (1971), and Wholey (1997) indicate that programs are generally judged on performance measurement (outcomes) despite considerable differences among program stakeholders about what constitutes satisfactory performance. Wholey (1981, pp. 92-93) adds that "Evaluations are intended, in particular, to assist managers in decisions on program regulations, guidelines, and technical assistance—and to assist policy makers in budget and legislative decisions." Most governmental calls for performance measures suggest that such measures will influence resource allocation decisions, as outcomes are often equated with program effectiveness and public

accountability (Newcomer, 1997; Tyler, 1971; Wholey, 1997; Wholey & Newcomer, 1997).

Newcomer (1997) also states that performance measurement typically captures quantitative indicators that tell what is occurring with regard to program outputs and perhaps outcomes but do not address "why" and "how" questions associated with program evaluation methods. She indicates that program managers must seek more than performance data to make effective management decisions—case studies of delivery sites and comparative analyses of data are two important services program evaluators provide.

Yin (1998, p. 236) succinctly states that a research design is *an action plan for getting from here to there*, where *here* may be defined as the initial set of questions to be answered and *there* is some set of conclusions, (answers) about the questions (italics are Yin's). According to Kosekoff and Fink (1982), a design strategy describes how one will group people and how variables are manipulated to answer evaluation questions.

Kosekoff and Fink (1982) also state that case study research design is used to examine a single, cohesive group seeking to answer questions that ask for a description of a program's participants, goals, activities, and results. Yin (1994, p. 32), specifically referring to case study research, indicates that a complete research design embodies a "theory" of what is being studied and that a good case study includes a developed theoretical framework, "no matter whether the study is to be explanatory, descriptive, or exploratory." Yin (1994, 1998) also states that the simple goal of developing a theory is to have an adequate blueprint for conducting a study.

The utilization of performance funding by some states presents clear relationships to interest in program evaluation and case study research design. Burke and Modaressi

(1999a) state that performance funding programs must be able to adapt to specific campus missions and practical problems of each respective state. Most state reforms relative to performance funding since the mid-1980s have been geared toward improving quality and efficiency (Serban, 1997).

Serban (1997) states that performance funding is the only budgetary reform to date that directly links part of the funding for higher education to achieved results in areas deemed important by state agendas as opposed to foci put on inputs and processes in traditional funding methods. Similarly, the 1996 New York State Education Department (NYSED) report refers to research indicating that several purposes for higher education performance reporting exist:

1. to increase legislative and public support for higher education;
2. to help allocate public funds;
3. to monitor the general condition of higher education;
4. to identify potential sources of problems or areas of improvement;
5. to improve the effectiveness and efficiency of colleges and universities;
6. to focus college and university efforts on state priorities and goals;
7. to assess progress on state priorities and goals;
8. to improve undergraduate education; and
9. to improve consumer information and market mechanisms (p. 7).

Bogue and Troutt (1980) make it clear that the performance funding policy's intentions were apparent in its developmental stages. They predicated the implementation of performance funding on the ideas that it should: 1) strike an appropriate balance between institutional autonomy and state-level review; 2) encourage

institutions to initiate the development of performance measures on which they might eventually be funded; and 3) promote candor in the analysis, evaluation, and application of performance results. Demonstrated outcomes, not processes employed, were to be the driving forces for performance funding.

Given that performance funding was intended to improve instructional quality, THEC, state legislators, board members, and campus representatives initially agreed on the following performance variables/indicators for the first three-year cycle, 1979-1982:

1. proportion of eligible academic programs accredited;
2. performance of graduates on a measure of general education outcomes;
3. performance of graduates based on a measure of specified field outcomes;
4. evaluation of institutional programs by enrolled students, recent, alumni, and community representatives/employers;
5. peer evaluations of academic programs; and
6. instructional performance and/or quality improvement (Bogue & Troutt, 1980, p. 58).

The investigator utilized a case study research design to evaluate the performance funding policy at Tennessee Technological University. Multiple techniques, including interviews, document review, and observations were used to capture the essence of how performance funding has affected policy-related activities at Tennessee Technological University. In particular, the investigator sought to determine what changes in academic policies addressing performance indicators have occurred and what impact have such changes had on performance outcomes and funding allocations. Simply put, the

investigator continuously critiqued and reviewed data to try to determine if and how the performance funding policy in Tennessee addresses educational issues.

Potential policy liabilities may affect the building of a conceptual framework for a case study relative to performance funding. Bogue and Troutt (1980) and Ewell and Jones (1996) suggest that it is possible for institutions to meet the values of indicators in order to enhance performance funding allocations without making significant changes, and in doing so, only accomplish unworthy or narrowly conceived goals. Another concern is that no single- or multiple-indicator system can effectively describe the overall educational quality for an institution and the diverse needs of students are left unattended (Ewell, 1994; Ewell & Jones, 1996).

Problem Statement

Current literature on performance funding at state levels and in Tennessee tends to focus on general process and criteria issues; that is, performance funding at particular institutions have been reviewed and documented, but the performance funding policy has not been effectively evaluated over an extended period of time. The literature lacks in-depth perspectives of specific institutions and how they have actively been involved with, and have responded to, changes in performance funding policy in Tennessee since its inception more than 20 years ago. In particular, the need exists to find specific evidence from campus stakeholders directly involved with the process to provide an institutional perspective relative to this funding program. There is also a need to consider potential long-term improvements to benefit all public colleges and universities in Tennessee and similar institutions in other states that utilize performance-based funding policies.

Purpose of the Study

This case study sought to describe and evaluate the influence of Tennessee's performance funding policy at Tennessee Technological University during the 20-year period, 1979-1999.

Answers to several research questions were sought:

1. What effect, if any, has performance funding had on academic policies and decision making at Tennessee Technological University since the implementation of the performance funding policy in Tennessee?
2. What are the strengths and liabilities of the performance funding policy according to current and former administrators and faculty members at Tennessee Technological University?
3. What changes are recommended by current and former administrators and faculty members to improve or enhance outcomes relative to the performance funding policy at Tennessee Technological University?

Significance

Conceptually, performance funding in Tennessee has enjoyed a long life because it was pursued as a joint venture by institutions, coordinating boards, the Tennessee Higher Education Commission, and legislators. Potential allocations were intended to be substantial enough to retain the interest of institutions so that colleges and universities would address performance questions raised by this policy.

There have been no significant case studies of the effects of performance funding, since its inception to the present, at any colleges and universities in Tennessee. This study will focus on how performance funding specifically affects a single institution as

opposed to other more general studies on performance funding. This study is part of a joint research effort; similar case studies are being conducted at two large research universities and two community colleges in Tennessee.

This case study will serve as a contribution to the literature in that it may provide a basis for Tennessee Technological University and other public institutions in Tennessee to continually review future performance funding-related efforts in order to maximize funding awards. In that Tennessee Technological University was one of the pilot schools involved with the Performance Funding Project, it is valuable to gain insights from an institution exposed to the policy since its inception. Public institutions in states outside Tennessee may also glean information from this study to further consider practical issues related to performance funding.

Delimitations

This study only describes and evaluates Tennessee Technological University's involvement with performance-based funding. The study focused on the 20-year period, 1979-1999. A literature review, document and data analysis and in-depth interviews with current and former academic and policy decision makers at Tennessee Technological University during the aforementioned period were carried out to collect information. Interviews were conducted during the summer and fall months of 2000. This case study was not intended to provide definitive findings or direction for other public colleges and universities in Tennessee or in the United States.

Limitations

This study covered an extended period of time and, while some stability has existed at leadership levels at Tennessee Technological University, numerous personnel

changes have occurred over the course of the past 20 years. Some potential participants were unavailable for interviews. Some potential participants choose not to take part in the interview process. Of those persons who did participate, respective long-term memories of activities relative to performance-funding issues were sometimes rather limited despite the investigator's belief that all participants sought to tell the truth in responding to inquiries.

Some records relative to performance funding at Tennessee Technological University were either unorganized or missing and thus affected collection of data and documents for analysis. Some documents that could have been of help to the investigator no longer exist.

Since participation in the study was voluntary, the participation level could have been low. To counter this latter possibility, however, a letter from Dr. E. Grady Bogue, one of the initiators and a leading researcher on performance funding, was mailed to the President of Tennessee Technological University emphasizing the importance of the institution's involvement in this project. Dr. Bogue, a Professor of Educational Administration and Policy Studies at the University of Tennessee, oversaw the dissertation activities. The investigator mailed letters to potential participants outlining the research process and provided an opportunity to respond positively or negatively regarding their wish to participate; this letter also highlighted the confidentiality for persons participating.

Definitions

Several terms in this document make reference to technical jargon inherent to higher education, political or research groups. Following is a list of terms and their

respective definitions to provide clarification in the consideration of issues presented through this paper:

Case study – An empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 1994). Creswell (1994) provides a similar definition, adding that the phenomenon is bounded by time and activity (such as a program) and utilizes a variety of data collection procedures.

Performance budgeting—Process whereby governors and legislators or coordinating or governing boards of higher education indirectly consider institutional performance—usually on a list of indicators—as a general context when determining the total budgets of public colleges and universities (Burke & Serban, 1998).

Performance funding –Process whereby separate and usually small allocations are tied directly to institutions' results, normally on a limited list of performance indicators such as accreditation of academic programs, student scores on standardized examinations, and percentage of graduates who pass licensing examinations (Burke & Serban, 1998; Folger, 1980).

Performance Funding Project--A significant undertaking formally initiated in Tennessee in the 1970s designed to enhance the links between state funding for public higher education institutions and student-related outcomes at individual institutions (Bogue & Troutt, 1980).

Research Design/Organization

This study developed a comprehensive review of performance funding as it relates to Tennessee Technological University from 1979-1999. The study also sought to

develop meaningful suggestions for administrators and faculty members at Tennessee Technological University relative to demonstrating improvements in learning outcomes. The study involved procedures to an evaluation of the performance funding program and conduct case study analysis. Following guidelines set forth by Creswell (1994); Merriam (1998); Worthen, Sanders, and Fitzpatrick (1997); and Yin (1994); primary data collection methods included a literature review, document analysis, focused interviews employing both closed- and open-ended question techniques, and unstructured observations.

The review of literature was conducted to ensure that multiple dimensions of the performance funding issue are presented prior to considering specific aspects of the topic relative to Tennessee Technological University. Document analysis provided historical background about changes relative to performance funding policy and practice both within Tennessee and specifically at Tennessee Technological University. Unstructured observations by the investigator provided a contextual reference point for additional research.

Interviews sought to obtain perceptions of performance funding from administrators and academic officers who have worked directly with the policy during a 20-year period at Tennessee Technological University. Closed- and open-ended questions were the same for all participants to assist the researcher in identifying important themes for the study's findings and for future research activity. Questions were revised as interviews were completed as deemed necessary to clarify responses or to garner additional information in future interviews.

This study is organized into five chapters. Chapter One provides an introduction, an overview, a problem statement, research questions, the study's purpose, the significance, delimitations and limitations, and definitions. Chapter Two consists of the literature review. The research design is explained in Chapter Three. Chapter Four includes data analysis, the study's results, and a summary of findings. Conclusions and recommendations for future research activity are contained in Chapter Five.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

Banta and Fisher (1989) cite studies indicating that two-thirds of states had taken action to secure evidence of institutional accountability for producing desired student outcomes in the 1980s and that, by 1987, three-fourths of campuses were discussing assessment, half were developing assessment procedures, and 80 percent were expected to introduce some form of assessment within a few years. More than half of states were developing or had issued a public report the performance of their respective higher education systems by 1996, according to a report issued by the New York State Education Department (NYSED, 1996).

The 1990s witnessed an emphasis on accountability concerns in higher education; that is, public institutions were expected to demonstrate definitive results related to educational processes and resources utilized. Bogue (1998), for example, cites a 1993 study conducted by the Southern Regional Education Board indicating that all but two of 15 states in that region had either mandated or imposed some form of annual comprehensive accountability report on public colleges and universities.

In accordance with a trend toward accountability, this review of literature details several aspects of performance funding including assessment, accountability as public policy, and indicators of performance measurement. It also provides a synopsis of performance funding programs in the United States, in Tennessee, and at Tennessee Technological University.

Assessment, Accountability, and the Evolution of Performance Funding

Ewell (1986) discusses how various states have responded to public concern about academic quality through the creation of mandates that students demonstrate specific levels of performance. Some states require teacher education majors to pass a standardized achievement test before graduating. Ewell (1986) states that Florida and Georgia, for example, utilize specifically developed testing plans. In South Dakota, the higher education system requires that all students must be tested for proficiency in their major field areas before they graduate. Colorado and New Jersey somewhat mimic Tennessee in that measurement results are used in the aggregate to provide evidence of program strengths and weaknesses rather than to decide the fate of individual students.

Ewell (1986) recognizes that successful assessment programs take time to become viable; he cites the performance funding program in Tennessee as an example of an effort that has become flexible and workable over time. Ewell (1986) and Serban (1997) state that accountability, the prioritization of goals, and financial motivation for institutions are among the distinct advantages of performance funding programs.

A 1995 survey of State Higher Education Finance Officers found that nine states had adopted and 10 more were considering linking a portion of funding for public institutions to incentive funding (Burke, 1997). Another survey in 1996 found that 14 states used quality outcomes factors in public higher education budgeting activities (Burke, 1997).

The 1996 NYSED report considers national interest in improving undergraduate education and making higher education more accountable to the public. The report highlights the transition from the assessment movement of the 1980s to the accountability

movement of the 1990s, whereby institutions went from being internally focused to serving public policy goals. The NYSED report addresses the replacement of traditional input indicators of quality such as faculty credentials and number of library books with outcomes such as skills and knowledge gained, length of time to graduation, job earnings of graduates, and skills graduates bring to their jobs.

Burke, Modarresi, and Serban (1999) suggest that tying performance funding to extended-period reports such as those associated with regional accrediting agencies might revitalize the importance of both performance funding and accreditation programs. They indicate that credibility through interactive review by multiple entities would enhance public perception of viability and make external evaluations more valuable for planning purposes.

Performance funding has become increasingly important as states consider higher education funding policies tied to accountability, access, assessment, efficiency, evaluation, and productivity (Bogue, 1999a; Serban, 1997). Many states are in the midst of considering funding options for higher education that place results and outcomes above processes by which institutions adhere to in terms of providing educational services to students. Complaints about poor performance have led states to consider performance relative to public priorities in their funding of public higher education institutions (Burke & Serban, 1997).

Performance Indicators

Bogue (1998) notes that performance indicator reports may allow public institutions to demonstrate accountability to public bodies, establish trend lines of activity and achievement, and mark progress toward goals to demonstrate stewardship of

government resources. In addition, Ewell and Jones (1994) stress that performance indicators must have face validity to be useful; that is, the indicators must be perceived by the user as relevant and appropriate measures of the phenomenon being considered. Selection of performance indicators is perceived as the most difficult aspect of planning and implementing performance funding programs, according to Serban (1997).

Serban (1997) found that selected indicators directly express the higher education priorities of each state. Burke (1997) found that most performance-funding indicators demonstrate efficiency and productivity measures. Retention, graduation rates, test scores on professional examinations, transfer between two-year and four-year campuses, faculty teaching load, and credits on graduation/time to degree are among the most common indicators used across states (Burke, 1997; Burke & Serban, 1997; NYSED, 1996).

Burke (1997) found that there is a relative lack of common choices for performance indicators among states for both two-year and four-year institutions. Performance measures for the Minnesota State Colleges and Universities, for example, include specific increases in the percentage of budget directed to academic resources, the number of credits issued through telecommunications, the retention of new entering freshmen who continue into the sophomore year, the percentage of students in two-year programs who graduate within two years of admission and the percentage of students who graduate within four years of admission from four-year programs, and the placement rates for occupational programs and the transfer rates for community and technical college programs (Callan & Finney, 1997).

Burke (1997) determined that states do not have a common approach in utilizing performance funding to support both types of institutions; that is, some states use the same indicators regardless of type, while others use a mix of common and unique indicators. Most states have common indicators, but some allow at least one campus-specific measure to reflect uniqueness of mission (Burke & Serban, 1997).

Weights of individual performance indicators in determining awards vary extensively in attempts to address missions of specific types of institutions. Burke (1997) determined that both two-year and four-year institutions demonstrated shifts over time from input to output and outcome indicators and significant emphasis on process-oriented indicators.

Bottrill and Borden (1994) provide a general aggregate list of more than 250 performance indicators currently in use across the United States. The number of performance indicators utilized by respective states varies significantly. According to Burke and Serban (1997), the number of performance indicators used to determine funding range from a low of five to South Carolina's high of 37. The majority of states use between seven and 16 indicators. External concerns of state policy makers influence indicator choices more than the academic community (Burke, 1997).

Despite attempts to focus on results, most performance funding programs include a significant number of process-related indicators. More than 40 percent of indicators represent processes or methods of delivering programs and services rather than outcomes (Burke & Serban, 1997).

Burke (1997) and Serban (1997) both state that while there is extensive borrowing of performance indicators among states, there is little commonality among indicators

actually utilized; they also believe that many states have been influenced by Tennessee's long-standing model (Burke, 1997; Serban, 1997). Serban's (1997) findings concluded that retention/graduation rates, job placement, professional licensing examinations, and employer satisfaction surveys are among the most commonly used performance indicators. Administrative size/cost, time to degree, and diversity of students were among the least common indicators utilized.

The 1996 NYSED report stresses that performance indicators have successfully focused institutional efforts on state policy goals when a small portion of funding is tied to performance, but that indicators can be perceived as negative by institutions if clear purposes and consequences were not well defined.

A 1997 study by Serban revealed that all states utilizing performance funding, with the exception of Colorado, use some combination of three types of success criteria: 1) institutional progress measured against past performance on specified indicators, 2) comparisons with both statewide and national peers relative to specific areas, and 3) comparison against pre-set targeted standards for each performance funding indicator.

Performance Funding at the National Level

Serban (1997) indicates that most states have employed performance funding primarily to enhance external accountability and institutional improvement; state needs and budget increases are secondary concerns. With the exception of Tennessee, which started performance funding in 1979, most states initiated performance funding efforts in the early 1990s (Burke & Serban, 1997). By 1984, Virginia and New Jersey had followed Tennessee's lead in securing grants to develop active assessment programs. Banta and Fisher indicated in 1989 that Colorado was actually instituting a penalty

system the following year whereby up to two percent of a public institution's budget could be withheld if evidence of outcomes assessment could not be provided. According to Bogue and Aper (2000), several states such as Arkansas, Kentucky, South Carolina, and Washington are still in the trial stages of employing performance funding.

Ten states were employing performance funding as a means to help fund higher education by 1997; eight of those states were likely to continue those programs (Burke & Serban, 1997). Thirteen states had some form of performance funding in place in 1998 (Burke, Modarresi, & Serban, 1999; Burke & Serban, 1998b). According to Burke, Modarresi, and Serban (1999), another 12 states are likely to adopt performance funding programs in the near future. Marks and Caruthers (1999) state that at least six states belonging to the Southern Regional Education Board utilized performance funding in the 1990s and that seven others were considering its employment in the future. Burke and Serban (1998b) indicate that half of the states in the country utilize performance funding and/or performance budgeting and that 70 percent of the states will have at least one of them by 2003.

Despite the existence of some common policy elements among states, there are marked differences in the specifics of how performance funding is carried out. Some states consider performance funding as a single activity with enactment consistent across all institutions, whereas other states delineate between performance funding criteria for four-year and two-year institutions (Burke, 1997).

In Minnesota, for example, performance funding is being awarded for the achievement of separate institutional performance measures as decided by the state legislature in cooperation with campus administrators of the University of Minnesota and

the Minnesota State Colleges and Universities. Minnesota's total effort allows up to $10 million to be released to colleges and universities as they attain goals—this amount accounts for less than one percent of state appropriations (Bogue & Aper, 2000).

While South Carolina is basing 100 percent of its funding on achievement related to performance indicators, additional appropriations of most other states range between .47 percent and 3.37 percent (Serban, 1997). Marks and Caruthers (1999) state that, with the exception of South Carolina, Tennessee provides the largest percentage bonus at more than five percent; most states usually range from one to three percent.

Most participants in Serban's 1997 study stated the preference that performance funding awards be funded as a separate, rather than inclusive, category in state budgets. Respondents to her study indicated increased funding for performance as being the key for all performance funding programs to improve, but general comments were positive regarding the future of such programs over the next several years.

The methods by which programs were started are diverse. Performance funding was mandated by legislation and performance indicators were prescribed in Colorado, Minnesota, Ohio, and South Carolina. Legislation for performance funding was mandated in Florida and Kentucky, but coordinating agencies and campus leaders proposed indicators to be utilized in determining awards. Arkansas, Missouri, and Tennessee implemented programs without legislation as institutional leaders and coordinating agencies worked jointly to get programs started (Burke, 1997; Burke & Serban, 1997; Burke & Serban, 1998b). While performance funding programs have been dropped in Arkansas and Kentucky, it should be noted that such actions occurred as new

state leadership reorganized and refocused governance of higher education (Marks & Caruthers, 1999).

Burke and Modarresi (1999b) critiqued several studies in concluding that there are characteristics that distinguish stable performance funding programs from unstable programs. These characteristics include:

1. Collaboration between government officials, state higher education coordinating bodies, and campus leaders;
2. Goals for institutional improvement, accountability, and enhanced state funding;
3. Policy values reflecting greater emphasis on quality than efficiency;
4. Appropriate time for planning and implementation;
5. Appropriate number of performance indicators;
6. Standards of success emphasizing institutional improvement and comparisons to peer institutions;
7. Restricted but substantial funding;
8. Additional rather than reallocated resources for funding;
9. Resolution of major difficulties relative to choosing performance indicators, assessing results, protecting diversity, and ensuring campus autonomy;
10. Stability of state-wide priorities and program requirements; and
11. Potential for successful long-term activity of performance funding (pp. 5-9).

Serban (1997) has found differences among constituents as to what value elements (equity, excellence, efficiency, and/or choice) should be emphasized as well as a perception by two-year institutions that performance funding favored four-year colleges and universities.

Recent findings by Burke and Serban (1998b) indicate a shift toward decentralization and deregulation in performance funding. Burke and Serban (1998a) provide a narrative analysis of performance funding in 11 states to consider future political and practical challenges and opportunities for this alternative funding method.

Burke and Modarresi (1999b) compared performance funding programs in Missouri and Tennessee, which are perceived to have stable programs, with four states that adopted performance funding and have since dropped it. As part of their study, they refer to previous analysis of programs in both Tennessee and Missouri to confirm the characteristics that are agreed upon as the most desirable for performance funding programs: careful choice of performance indicators, recognition of the difficulty of measuring results in higher education, and preservation of institutional diversity.

Several practical problems are associated with performance funding, including disagreement on standards of evaluation, narrow definitions of performance that could potentially lead to "teaching to the test," and the inability to consider non-quantifiable activities that enhance the quality of life on individual college campuses (Bogue & Troutt, 1980; Pickens, 1982; Richards & Minkel, 1986). Serban (1997) indicates that defining and measuring objectives, budget instability, and cost of implementation as the most difficult challenge associated with such programs.

Performance Funding in Tennessee

The Performance Funding Project was designed to create a means of allocating funds in an equitable manner that would complement, and not replace, the enrollment-driven fund policy system (Banta & Fisher, 1986; Bogue & Troutt, 1980). As part of a five-year development effort, all but two of 21 public institutions in Tennessee submitted proposals for inclusion in performance funding pilot projects (Bogue & Troutt, 1980).

Eleven institutions in Tennessee were selected for contracted, two-year pilot performance funding projects from 1976-1978 as part of an overall five-year effort (Bogue & Aper, 2000; Bogue & Troutt, 1980; Dumont & Troelstrup, 1979; Pickens, 1982). The first year called for the development of instructional goals and corresponding performance indicators and the second year focused on performance indicator data acquisition and the exploration of funding policies that would perpetuate effective performance (Bogue & Troutt, 1977a; Dumont & Troelstrup, 1979; Fry, 1977; Pickens, 1982).

According to Bogue and Troutt (1980) and Dumont (1980), focus of the pilot projects was primarily upon instructional goals at the institution level, not at program, departmental, or college levels, with the exception of the engineering college on the Knoxville campus at the University of Tennessee and the pharmacy college at the University of Tennessee College of Health Sciences in Memphis. They also indicate that the state-wide project was initiated with two assumptions: 1) that money directed to institutions would be linked to institutional scores on performance indicators, and 2) money would be directed as a reward for performance only after successful performance (that is, quality, however defined) had been demonstrated.

In the early years of the Performance Funding Project, institutions developed multiple-year plans with annual funding recommendations and performance expectations (Bogue & Troutt, 1980; Richards & Minkel, 1986). Following is a listing of what each institution agreed to produce by June 30 of each respective academic year:

Fiscal Year	Performance expectation
1979-1980	Profile of performance goals and objectives for each academic program offered by the institution
1980-1981	Profile of performance measures/indicators that would permit institutional assessment of the program goals and objectives previously identified
1981-1982	Initial profile of performance data on the measures/indicators previously identified
1982-1983	Continuing report concerning any revision to goals and indicators, the acquisition of data, and the application of data to program evaluation

The performance funding pilot policy adopted by Tennessee in October 1979 ultimately allowed institutions to earn up to an additional two percent of state appropriations based on evaluation of five performance variables (Banta & Fisher, 1989; Bogue & Aper, 2000; Ewell, 1986; Folger, 1980; Pickens, 1982). A sixth optional variable was included to provide flexibility in the kinds of evaluation projects and data that campuses could submit; in following, of the six variables, the five producing the greatest number of points for each institution were counted (Bogue & Troutt, 1980). Initially, institutions could earn a maximum of 20 points for each variable for a total possible score of 100 points (Bogue, 1980, 1999b; Bogue & Troutt, 1980; Pickens, 1982):

Variable	Points
Proportion of Eligible Programs Accredited	20
Performance of Graduates on General Education Outcomes	20
Performance of Graduates on Specialized Field Outcomes	20
Evaluation of Programs by Students/Alumni/Employers	20
Peer Evaluation	20
Total	**100**

An example of how the performance funding policy in its initial form would have worked for a mythical institution, Tennessee Utopian University, is as follows:

Variable	Points
Proportion of Eligible Programs Accredited	16
Performance of Graduates on General Education Outcomes	15
Performance of Graduates on Specialized Field Outcomes	18
Evaluation of Programs by Students/Alumni Employers	20
Peer Evaluation	18
Total	**87**

In the simplest sense, if Tennessee Utopian University had received $50 million in state allocations, the performance funding formula would have generated the following award:

Budgeted State Allocation to Institution (in dollars)		**Maximum Percentage Available through Performance Funding**		**Percent of Points Earned**		**Performance Funding Award**
$50,000,000	**X**	**.02**	**X**	**.87**	**=**	**$870,000**

What the above scenario does not actively consider is if the state does not provide full funding for a given year. For the above example, if Tennessee Utopian University had requested $50 million for the budget, but was only appropriated $45 million, or 90 percent of the initial request, the amount to be received as a result of performance funding would be reduced accordingly:

$45,000,000 X .02 X .87 = $783,000

With this latter example, individuals would likely consider the funding shortfall of $5 million, which would not be completely recovered through performance funding based on a maximum two-percent award. This scenario would likely be viewed as a detriment for rewarding institutions for improvement in outcomes, since the original perceived needs of the institution are not addressed fully at the outset and, in this case, the amount earned through performance funding would not make up the difference. This latter case would likely bring up the argument from some individuals that excellence in performance cannot realistically be expected if the state does not provide enough money to address basic needs, let alone improvement in academic-related outcomes.

A total of 23 institutions submitted performance data the first year of the study and evaluation scores ranged from zero to 67. About 95 percent of the Tennessee Higher Education Commission's $2.1 million request was funded by the state. In 1980, the peer evaluation variable was replaced by another variable with an emphasis on evaluation planning (Bogue, 1980; Pickens, 1982).

Some early criticisms of the project included: the need for more appropriate indicators for two-year colleges and graduate institutions, the insufficient dollar return on the Instructional Evaluation Schedule as a result of the financial investment needed for

evaluation activities, and simply that the exercise drained resources already insufficient to produce quality (Banta & Fisher, 1984, 1989; Bogue & Troutt, 1980; Pickens, 1982). Bogue and Troutt (1980) also indicated that some dysfunctions in wording and construction of some initial performance standards existed and that initial performance variables utilized were not broad enough to allow submission of evaluation activities central to instructional improvement. Banta and Fisher (1989) found that, among faculty members, prescription of the use of standardized examinations constituted was perceived to be an abridgment of academic freedom.

Banta and Fisher (1984) state that changes to curricula, instruction, and support services can be made quickly in adapting to performance funding initiatives whereas changes in general education are slower in developing because of political implications within respective institutions. According to Banta and Fisher (1984, 1989), Bogue (1999b), and Bogue and Troutt (1980), the weight for each of the respective variables first changed in 1982. In that year, the Tennessee Higher Education Commission proposed different variables for the Instructional Evaluation Schedule for Fall 1983 that placed increasing emphasis on objectivity, quality of the evaluation product rather than the evaluation process, and flexibility of application to differing types of institutions (Pickens, 1982). Criteria and their corresponding weights assigned are currently reviewed and altered every five years (Richards & Minkel, 1986).

The performance funding standards for the 1982-1987 cycle were as follows (Bogue, 1999b; Bogue & Troutt, 1980):

Variable	4-Year	2-Year
Program Accreditation	25	25
General Education	25	25a
Major Fields	30b	30b
Alumni Surveys	10	10
Instruction Improvement Measures	10	10
Bonus Points	10c	10c
Totals	**100**	**100**

Notes: a—Two-year institutions could choose between general education or job placement measures; b—Institutions could choose between major field tests or external reviews of non-accreditable programs; c—Institutions could earn up to a total of 10 points over the cycle (no more than five points in one year) for piloting assessment measures

The number of accredited programs on more than half of Tennessee's public campuses increased after the implementation of performance funding (Banta & Fisher, 1989). The number of schools administering comprehensive examinations in major fields also increased following implementation of the performance funding initiative. By the conclusion of the first five-year cycle of the program, colleges and universities had tested majors in 80 percent or more of the programs offered.

The amount institutions were eligible to earn became five percent in 1984 (Banta & Fisher, 1986).

Banta and Fisher (1989) identified seven factors that appear to have contributed to the survival of performance funding in Tennessee during its early phases: 1) assessment activities were voluntary; 2) performance funding was supplemental to budgets, not deducted from budgets if goals were not achieved; 3) supplements were sufficient in size

to encourage institutions to overcome barriers; 4) institutional representatives participated in formulating guidelines; 5) institutions were granted several years to implement assessment activities, consolidate data from multiple sources, and utilize results to improve programs; 6) policy guidelines stimulated institutional creativity; and 7) guidelines avoided undue emphasis on tests scores.

A listing variables and corresponding potential point values for the five-year cycle covering 1987-1992 was as follows (Bogue, 1999b):

Variable	4-Year	2-Year
Program Accreditation	20	20
General Education	20	20
Major Fields	20	20
Master's Review/Placement	10a	10a
Alumni Surveys	15	15
Instruction Improvement Measures	15	15
Totals	**100**	**100**

Note: a—Master's reviews at universities; placement at two-year institutions

The second five-year cycle (1987-1992) demonstrates a partial return of emphases in the original formula utilized during the first few years of performance funding (1979-1982).

The 1992-1997 performance funding cycle utilized the following standards (Bogue, 1999b):

Variable	4-Year	2-Year
Program Accreditation	10	10
General Education	10	10
Major Fields	10	10
Master's Review/Placement	10a	10a
Peer Review of Non-accredited Programs	10	10
Alumni/Enrolled Student Surveys	10b	10b
Instruction Improvement Measures	10	10
Student Enrollment Goals	10	10
Student Retention and Graduation	10	10
Mission-Specific Goals	10	10
Totals	**100**	**100**

Notes: a—Master's review at universities; placement at two-year institutions; b—Institutions alternated between alumni surveys and surveys of enrolled students

The performance funding standards have become somewhat more complicated and arguably extensive in recent years. Inclusion of alumni surveys was changed for the 1992-1997 cycle and was combined with student surveys. In an apparent effort to simplify the numerical measurement of the performance funding process, virtually all previously utilized performance variables were decreased in weight and several new ones were added. These new indicators rewarded institutions for improvements against their own benchmarks (Banta & Borden, 1994). It is interesting to note that all performance indicators during the third five-year cycle had equal weight values. According to Banta and Borden (1994), a statement espousing both accountability and improvement were specifically added to the policy in the third five-year plan for performance funding.

The performance funding formula originally slated for use from 1997-2002 utilized 10 performance indicators with varying levels of weight clustered among four groups of standards (Bogue, 1999b):

Tennessee Performance Standards and Points: 1997-2002

	4-Year	2-Year
Standard One – Academic Performance: General Education		
1.A. Foundation Testing of General Education Outcomes	15	15
1.B. Pilot Evaluations of Other General Education Outcomes	10	10
Standard Two – Academic Performance – Major Fields		
2.A. Accreditation of Academic Programs	15	10
2.B. Program Review	20	10
2.C. Major Field Assessment	15	15
Standard Three – Student Success and Satisfaction		
3.A. Enrolled Student – Alumni Survey	10	10
3.B. Retention/Persistence	5	5
3.C. Job Placement		15
Standard Four – State and Institutional Initiatives		
4.A. Institutional Strategic Plan Goals	5	5
4.B. State Strategic Plan Goals	5	5
Totals	**100**	**100**

Bogue (1999b) states that while initial standards of the Tennessee performance funding policy stressed improvement in academic programs, more recent focus has evaluated comparative standards of performance based on peer or national norms. An

institution may currently receive an addition of up to 5.54 percent of its appropriations in performance funding (Bogue & Aper, 2000).

For 1999-2000, a total of approximately $29 million was recommended for performance allocation to state campuses in Tennessee, but a slightly smaller percent of the traditional formula-driven recommendation funded as awards were to be made available since the traditional formula was not fully funded (Bogue, 1999b). To date, about $343 million has been awarded over the 20-year history to state-assisted colleges and universities through performance funding and virtually all eligible programs are now accredited as opposed to only about two-thirds when performance funding was implemented in Tennessee (Bogue, 1999b; Bogue & Aper, 2000).

In June 2000, Dr. Richard Rhoda, Executive Director of the Tennessee Higher Education Commission, sent a memorandum to the heads of both the Tennessee Board of Regents and University of Tennessee Systems as well as the campus heads of public colleges and universities in Tennessee. The memorandum put forth the final Performance Funding Standards for 2000-2005. Dr. Rhoda stated in the document that the previous cycle (1997-2002) was shortened in efforts to strengthen the standards and to align the program with the State's higher education master planning cycle. According to Dr. Rhoda, the following standards were enacted July 1, 2000:

Tennessee Performance Standards and Points: 2000-2005

		4-Year	2-Year
Standard One – Academic Testing and Program Review			
1.A.	Foundation Testing of General Education Outcomes	15	15
1.B.	Pilot Evaluation of Other General Education Outcome Measures	5	5

1.C.	Program Accountability		
1.C.1.	Program Review	10	5
1.C.2.	Program Accreditation	15	10
1.D.	Major Field Testing	15	15
Standard Two – Student Satisfaction			
2.A.	Student/Alumni/Employer Surveys	10	10
2.B.	Transfer and Articulation	5	
Standard Three – Planning and Collaboration			
3.A.	Mission Distinctive Institutional Goals	5	5
3.B.	State Strategic Plan Goals	5	5
Standard Four – Student Outcomes and Implementation			
4.A.	Output Attainment		
4.A.1.	Retention/Persistence	5	5
4.A.2.	Job Placement		15
4.B.	Assessment Implementation	10	10
Totals		**100**	**100**

The Performance Funding Pilot Project at Tennessee Technological University

Tennessee Technological University, along with 10 other colleges and universities, was an active participant in implementing performance funding in Tennessee. Over the course of the pilot projects beginning in the 1970s, each of the institutions received about $15,000 or $16,000 annually from the Tennessee Higher Education Commission; Tennessee Technological University received a total of $32,000

to participate in the pilot associated with the Performance Funding Project (Bogue, 1999b; Bogue & Troutt, 1980; Dumont, 1980).

During the pilot phase, the vice president for academic affairs at Tennessee Technological University assumed administrative responsibility for the project and the chair of the sociology and philosophy department served as director (Bogue & Troutt, 1980; Dumont, 1980). According to Dumont (1980), the process involved the following timeline:

First Year (1976-1977)

- March-April 1976: Selection of faculty associates for project
- May-June 1976: Development of a set of institution-wide goals by faculty associates
- June-August 1976: Campus-wide faculty survey of instructional goals
- September-October 1977: Identification of performance indicators

Second Year (1977-1978)

- October-December 1977: Planning for gathering of data
- January 1978: Increasing faculty and student awareness of project activities
- February 1978: Preparation for major data-gathering efforts
- March-April 1978: Gather data on performance indicators
- May-June 1978: Final analysis of all project data

Dumont (1980) states that development of appropriate performance indicators may have been the most challenging aspect of the pilot project at Tennessee Technological University in that faculty members involved quickly determined the difficulty involved in assessing specific outcomes based on instructional goals.

According to Bogue and Troutt (1980) and Pickens (1982), the following excerpt regarding performance measures was included in Tennessee Technological University's initial report to the Tennessee Higher Education Commission:

> Tennessee Technological University [enrolls] approximately 6,500 FTE students [and has] a range of undergraduate and graduate programs, but with historic emphasis on science and engineering (including a doctoral program in engineering). Extensive faculty involvement was established through a program of "faculty associates," and 90% of the faculty participated in the goals identification exercise. Three categories of data—extra-institutional standardized tests, student and alumni surveys, and institutional activity data—were used to assess the performance of a representative sample of seniors on general education goals of communication, knowledge of history and social/behavioral science, understandings of science and technology, problem solving skills and preparation for further study. . . Student performance was above national and state referent groups on the ACT College Outcomes Measures Project battery. Changes scores for students on the ACT examination were also significant. Locally developed student and alumni surveys and other institutional data confirmed positive growth on goals. The university also has an ongoing evaluation of its teacher education program which was linked to this effort.

A total of 31 institution-wide instructional goals emerged initially from Tennessee Technological University's pilot project. The university eventually selected 14 institution-wide instructional goals for the pilot project (Dumont, 1980; Dumont & Troelstrup, 1979).

General education goals at Tennessee Technological University were identified as "essential skills" (mathematical, reading, speaking, and writing), "basic understandings" (history, social sciences, and science and technology), "special attributes" (critical thinking), and "preparation" for further study and/or employment. Each instructional goal had three classes of indicators: 1) "objective," readily available and pre-existing data

on institutional activity; 2) extra-institutional standardized tests; and 3) student and alumni reports of progress toward goal attainment (Dumont, 1980; Dumont & Troelstrup, 1979).

Dumont and Troelstrup (1979) used the general education goals to consider the relationships between test performance (involving the ACT Battery and the ACT College Outcomes Measures Project) and student testimony by conducting a study at Tennessee Technological University. The ACT tests were utilized to assess the ability of students to use and apply skills and to assess general education outcomes (Bogue & Troutt, 1980). For the purposes of the Performance Funding Project at Tennessee Technological University, students were only exposed to the "Communicating" and "Solving Problems" portions of the "Functioning Within Social Institutions" and "Using Science and Technology" sub-domains.

Although concurrent validity of the student testimony was supported in Dumont and Troelstrup's 1979 study, much of the variance in self-reported progress scores was not explained by test performance results. Their findings implied the need for better selection, implementation, and interpretation of instructional outcomes measures with regard to performance funding at Tennessee Technological University. They stressed that student testimony or self-reported data should be utilized as a complement to test performance data and called for multiple indicators in assessing progress toward institutional goals.

Dumont (1980) indicates that faculty members at Tennessee Technological University were generally resistant to the pilot performance funding project. Faculty members were leery of additional external control over activities by the Tennessee

Higher Education Commission and the Tennessee Board of Regents. They also were suspicious of the use of performance indicators; demonstrating concerns that the "means" could in fact become the "ends" and ultimately, faculty would end up teaching to a test rather than toward instructional goals.

In addition, faculty members expressed concerns about reliability, validity, and generalizability issues as well as wondering which institutions really stood to gain from the enactment of performance funding. Though not specifically mentioned to faculty members, they realized that performance funding was in itself a means to increase their accountability to external constituencies (Dumont, 1980).

Dumont (1980, pp. 22-23) himself alternatively states that:

> What began as a project intended primarily to advance the interests of accountability through *evaluation* and an associated *coercive* (reward or punishment) mechanism involving differential distribution of funds (resources) *shifted* to an emphasis more congenial to the values of academic freedom and autonomy, i.e., the *encouragement* (as opposed to coercion) of *evaluation for improved instructional performance* (as opposed to evaluation for control) through the provision of "incentive" monies (italics emphases are Dumont's).

Dumont (1980) further indicates that academic deans and administrators cooperated fully in working at both state and campus levels with the pilot project. He postulates that the completion of the pilot project at Tennessee Technological University occurred because faculty members were given responsibility for its execution. He also states that the greatest incentive for performance funding may be its promise for partial compensation for some faults attributed by faculty to enrollment-driven formulas.

In its first year with the Performance Funding Project, Tennessee Technological University obtained a score of 67 out of a possible 100 points, the highest of any

participating colleges and universities (Bogue, 1999b; Bogue & Troutt, 1980). Tennessee Technological University was eligible for a total of $246,888 based on projections for a perfect 100 score and was recommended to receive $165,415 based on its score (Bogue & Troutt, 1980). Tennessee Technological University received a total of $22,165,068 through performance funding from the fiscal years 1979-1998 (Bogue, 1999b). Table 1 on the following page lists the points and dollars awarded to Tennessee Technological University during the period 1978-1998.

With three exceptions, Tennessee Technological University's annual performance funding monetary award has increased in succeeding years since 1978-79. Within the policy's points system, institutional scores appear to have been relatively consistent for each award cycle. While funding through the policy has continued at a gradually increasing rate, what is not clear is if the performance funding policy has addressed stakeholder concerns relative to educational outcomes.

Tennessee Technological University has scored favorably in terms of total points acquired when compared to other colleges and universities in Tennessee. In particular, Tennessee Technological University compares very favorably to other four-year institutions. Table 2 lists Tennessee Technological University's scores as well as those of institutions achieving the highest scores for the years 1978-1998.

Summary

Tennessee Technological University has documented significant involvement with Tennessee's performance funding policy through consistently high scoring relative to performance indicators as well as through publishing of articles relative to the institution's early actions related to the policy. To date, however, there has not been

Table 1. Performance funding points and dollars awarded to Tennessee Technological University, 1978-1998.

Fiscal Year	Points	Dollars Awarded	Ave. Points for Cycle	Total Dollars for Cycle
1978-1979	67	$ 165, 415		
1979-1980	69	$ 187,118		
1980-1981	69	$ 185,203		
1981-1982	82	$ 251,363	71.8	$ 789,099
1982-1983	99	$ 766,963		
1983-1984	99	$ 929,363		
1984-1985	98	$1,013,859		
1985-1986	97	$1,177,917		
1986-1987	98	$1,248,162	98.2	$5,136,264
1987-1988	89	$1,327,242		
1988-1989	90	$1,414,798		
1989-1990	78	$1,252,600		
1990-1991	82	$1,316,836		
1991-1992	80	$1,214,347	83.8	$6,525,823
1992-1993	93	$1,507,575		
1993-1994	94	$1,668,254		
1994-1995	92	$1,653,717		
1995-1996	92	$1,634,965		
1996-1997	92	$1,588,379	92.6	$8,050,890
1997-1998	95	$1,622,992		

Source: Bogue, 1999b.

Table 2. **Highest scores on performance funding points compared to scores at Tennessee Technological University (TTU), 1978-1998.**

Fiscal Year	Institution with Highest Score	Points	TTU score	TTU rank
1978-1979	TTU	67	67	1
1979-1980	Volunteer State C. C.	80	69	5
1980-1981	Motlow State C. C.	88	69	7
1981-1982	TTU	82	82	1
1982-1983	Jackson State C. C.	100	99	7
	Motlow State C. C.	100		
	Nashville State Tech. Inst.	100		
	St. Tech. Inst. at Memphis	100		
	U. of Memphis	100		
	Volunteer State C. C.	100		
1983-1984	Dyersburg State C. C.	100	99	7
	Jackson State C. C.	100		
	Motlow State C. C.	100		
	Nashville State Tech. Inst.	100		
	Roane State C. C.	100		
	Volunteer State C. C.	100		
1984-1985	Jackson State C. C.	100	98	7 (tie)
	Nashville State Tech. Inst.	100		
	Pellissippi State Tech. C. C.	100		
	Roane State C. C.	100		
	St. Tech. Inst. at Memphis	100		
	Volunteer State C. C.	100		
	Walters State C. C.	100		
1985-1986	Cleveland State C. C.	100	97	14
	Columbia State C. C.	100		
	Jackson State C. C.	100		
	Motlow State C. C.	100		
	Nashville State Tech. Inst.	100		
	Shelby State C. C.	100		
	State Tech. Inst. at Memphis	100		
	Volunteer State C. C.	100		
	University of Memphis	100		

Table 2. (continued)

Fiscal Year	Institution with Highest Score	Points	TTU score	TTU rank
1986-1987	Cleveland State C. C.	100	98	13
	Dyersburg State C. C.	100		
	Nashville State Tech. Inst.	100		
	Roane State C. C.	100		
	Shelby State C. C.	100		
	St. Tech. Inst. at Memphis	100		
	Volunteer State C. C.	100		
	Walters State C. C.	100		
1987-1988	Roane State C. C.	97	89	5
1988-1989	Chattanooga St. Tech. C. C.	97	90	5
1989-1990	Walters State C. C.	97	78	17
1990-1991	Columbia State C. C.	93	82	10 (tie)
1991-1992	Walters State C. C.	96	80	15
1992-1993	Columbia State C. C.	100	93	10
	Volunteer State C. C.	100		
1993-1994	Columbia State C. C.	99	94	4 (tie)
1994-1995	Volunteer State C. C.	98	92	8 (tie)
1995-1996	State Tech. Inst. at Memphis	95	92	5
1996-1997	State Tech. Inst. at Memphis	97	92	7 (tie)
1997-1998	State Tech Inst. at Memphis	100	95	12

Source: Bogue, 1999b

careful analysis to determine what specific long-term effects, if any, performance funding has had at Tennessee Technological University relative to changes in academic policy decisions. It is also unclear how money earned through performance funding is used for the benefit of the institution. In addition to addressing these concerns, an evaluation of the performance funding policy at Tennessee Technological University may also help determine new ways to improve academic outcomes.

CHAPTER THREE

RESEARCH DESIGN

Introduction

Taking multiple perspectives into account, it may be unclear if performance funding has been responsible for meaningful changes in academic decision making or if any changes occurring have been minor and occurred merely to respond to directives of the policy. The investigator sought answers to questions regarding the impact, if any, that performance funding has had at Tennessee Technological University relative to enhancing educational outcomes and decision making on campus.

This chapter provides an overview of research design concepts relative to program evaluation and case study activities. In following, these concepts were applied in conducting a study on the effects of performance funding at Tennessee Technological University to maximize benefits of both means to determine if performance funding policy efforts at Tennessee Technological University result in sought-after educational outcomes.

Findings from the research address the effects of performance funding at Tennessee Technological University between 1979 and 1999. Research activities relative to studying the long-term effects of performance funding at Tennessee Technological University took place between June and September 2000. Research activities included individual interviews and extensive document analysis. The investigator also intended to observe one or two Dean's Council meetings where discussion was to focus on performance funding, but no such meetings were held during the time in which the study

was conducted. Data utilized in this study are grouped in order by prevailing themes followed by secondary findings as they relate to individual research questions.

The Concept of Program Evaluation

Astin (1993) credits the establishment of the performance funding system in Tennessee as being a major catalyst in the development of what may be termed as the modern assessment movement in public higher education, providing the opportunity for enhanced program review and evaluation. In considering program evaluation, Kosecoff and Fink (1982) indicate that evaluation involves procedures being utilized to appraise a program's merit and to provide information about its goals, expectations, activities, outcomes, impact, and costs. Rein (1981) succinctly states that the critical aim for an evaluation study is whether the original intent of a program was carried out.

Patton (1988) and Scriven (1991) state that both summative and formative purposes are inherent to evaluation. Summative purposes imply a principal interest in program outcomes, often by external parties, whereas formative purposes imply a principal interest in forming or re-forming a program by evaluating how well a program's internal mechanics are operating (Newcomer, 1997; Thomas, 1994; Worthen, Sanders, & Fitzpatrick, 1997). Ultimately, the purpose of an evaluation should reflect the concerns key stakeholders have about a program (Rich, 1981; Thomas, 1994; Worthen, Sanders, & Fitzpatrick, 1997).

The Concept of a Case Study

According to several authors (Thomas, 1994; Worthen, Sanders, & Fitzpatrick, 1997; Yin, 1994, 1998), a case study is a frequently used approach involving focused interviews, observations, documents, and/or other means to gather qualitative information

about a program. Yin (1994, 1998) indicates that case studies generally are the preferred research strategy when "how" and "why" questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context. Among the many situations in which case studies are used for research purposes, Yin (1994, 1998) cites policy, public administration research, and organizational and management studies. Yin (1994) also adds that case studies, unlike other forms of qualitative research, need not always include direct, detailed observations as a source of evidence.

Lincoln and Guba (1985) and Merriam (1998) state that generalizability, or external validity, of a case study is obtained through "thick description," a thorough, complete understanding of the case to help other persons understand and judge its worth as well as the context within which it has operated.

Both Creswell (1994) and Yin (1994, 1998) emphasize dominant modes of data analysis involved with case studies; in particular, one must compare "patterns" in responses relative to predictions based on theory from literature, seek causal links and explanations, and trace pattern changes over time through time-series analysis.

Combining Concepts to Study Performance Funding at Tennessee Technological University

A combination of both program evaluation and case study analysis were used to critically review, analyze and report the long-term effects of performance funding at Tennessee Technological University. Specifically, the investigator sought to determine if campus stakeholders perceived that the performance funding policy has had impact on determining academic goals and related program actions.

Interviews

Some status sampling was desirable for this study; that is, persons solicited for interviews were thought to be somewhat knowledgeable about relevant issues (Dobbert, 1984). Potential participants considered able to actively speak about both the concept of performance funding as well as its application in the academic setting at Tennessee Technological University were solicited for interviews.

A variety of current and former campus stakeholders associated with Tennessee Technological University were asked for input and analysis. Potential interview participants included a mix of current and former presidents, vice presidents, academic deans, selected department chairs from each of the colleges, and selected faculty members who were involved with the development of Tennessee Technological University's performance funding policy at its inception. Additional faculty members who perhaps have not been directly involved with the performance funding policy were also solicited for interviews in order to find out what some stakeholders may not know about the policy's operation on campus in order to identify a well-rounded sample of stakeholders.

"Snowball sampling" was also employed to identify additional potential participants. Dobbert (1984) describes snowball sampling as requesting individual interview participants to identify other experts on the topic of discussion. Utilization of this technique increased the number of participants from which the researcher solicited information. Additionally, through potential multiple naming of key individuals in snowball sampling, key persons of influence related to performance funding at Tennessee

Technological University not previously considered for the study were brought to the forefront.

Dr. E. Grady Bogue, the principal investigator's advisor, sent a letter (see Appendices) of introduction on June 24, 2000 on the principal investigator's behalf to Dr. Angelo A. Volpe, then soon-to-be retiring President of Tennessee Technology University; Dr. Volpe's retirement was effective June 30, 2000. A copy of the letter was also mailed to Dr. Robert R. Bell, then Dean of the College of Business Administration and President-elect of Tennessee Technological University; Dr. Bell assumed his duties as President July 1, 2000. After making arrangements by telephone, the principal investigator met individually with both Dr. Volpe and Dr. Bell on July 12, 2000. These meetings were utilized to introduce the study; to help gain access to faculty, staff, and documents; and to conduct initial interviews.

A first group of introductory letters, consent forms, and stamped, return envelopes were mailed on July 19, 2000 to 23 potential interview participants. A similar mailing was directed toward 26 additional potential participants on August 2, 2000. A third mailing was sent on August 15, 2000 to 15 more potential participants. Including Dr. Bell and Dr. Volpe, a total of 66 persons were solicited to participate in individual interviews.

Twelve interviews were arranged through telephone follow-up by the principal investigator after the receipt of signed consent forms. Two interviews were arranged through telephone follow-up despite the principal investigator receiving no signed consent forms. Two interviews were arranged through electronic mail in response to questions received from potential participants via that mode of communication. Two

interviews were set up through a combination of telephone and electronic mail interaction.

Two potential interview participants sent e-mail messages to the investigator declining to be interviewed. One of these individuals had recently assumed administrative duties on campus and felt unable to discuss the performance funding policy with any confidence. The other person is a retired administrator claiming to know very little about the policy.

The investigator also received five responses from potential participants by return mail declining to be interviewed. Reasons stated by two of the individuals related to lack of time due to an overload of campus-related duties. Two potential participants indicated they were not knowledgeable enough about the policy to comment. Another potential participant was identified by a spouse as being too ill to participate in an interview.

During interviews, the investigator asked participants to identify additional individuals to solicit to participate in the interview portion of the study. A total of 17 individuals were identified by study participants as people the investigator might contact for information; four individuals were identified on more than one occasion with Mrs. Tolbert being identified five times. All of the 17 persons identified by participants had either already participated in interviews or were later contacted through the mail by the investigator to request participation. Five of the 17 individuals identified by other interview participants took part in the study.

A total of 18 interviews were conducted during the period July 12-September 25, 2000. Fifteen interviews were conducted on Tennessee Technological University's campus. One interview, with a retired administrator, was conducted at that individual's

home in Cookeville, Tennessee. Another interview was conducted with a retired administrator at a restaurant in Nashville, Tennessee, near the participant's home. Yet another interview, with a former faculty member presently living outside the continental United States, was conducted by telephone. After completing individual interviews, coded audio tapes were transcribed by the study's secretary and edited by the principal investigator. After satisfactory transcriptions were finalized, the audio tapes were destroyed by the investigator.

It should be noted that two of the interviews were conducted simultaneously. A college Dean relatively new to Tennessee Technological University had, unknown beforehand to the investigator, invited the former Interim Dean to join a scheduled interview. The Dean was knowledgeable about performance funding following employment in other states, but did not feel qualified to discuss the policy relative to Tennessee Technological University. The Dean indicated that the former Interim Dean, also a long-time, tenured professor in the college, was better qualified to remark on the historical context of performance funding at Tennessee Technological University.

A total of 13 of the study's 18 interview participants agreed that it was acceptable for them to be identified in the study. Each of these persons signed a clearly marked area on the consent form stating that they could be named in the study. Participants were informed that their involvement was voluntary and that they may have chosen to withdraw from the study at any point up to its completion. As a courtesy for commitments of time and insights, hand-written thank-you notes were mailed to all participants within four days after each individual interview was conducted.

Each interview lasted approximately one hour. With permission, interviews were recorded on an audio tape recorder and transcribed so all obtained information could be retrieved. To provide anonymity and confidentiality, recorded tapes were identified by a code known only to the investigator. A secretary was the only person other than the investigator to have access to audio tapes. The secretary was required to sign a statement of confidentiality before assuming any duties relative to the study (see Appendices). Tapes were locked in cabinets except when transcription activities were occurring. All tapes and written documentation associated with the interviews will be destroyed five years after the conclusion of the study.

Individual interviews comprised the primary method for data collection, utilizing both open-ended and closed-ended questions (see Appendices). Interview questions were constructed with the idea of gaining new information and insight as well as confirming information already obtained from document analysis and previous interviews (Lincoln & Guba, 1985). Interviews are useful when the purpose of data collection lacks clarity, needs depth of information, or is ill-suited for a written survey (Worthen, Sanders, & Fitzpatrick, 1997).

Yin (1994) discusses the need to employ a protocol; that is, the research instrument as well as the specific procedures and rules that should be followed in using the instrument were included in the study to increase reliability. Questions were added, deleted, and/or revised from the interview protocol (see Appendices) as interviews occur in order to obtain clarification and/or to obtain additional information.

Interview participants were asked 11 primary questions relative to performance funding at Tennessee Technological University and, depending upon responses may have

been asked several secondary questions in efforts by the investigator. Most questions asked of participants were open-ended; participants were asked to expand on questions that were closed in nature. Quotations of interview participants are frequently cited to present poignant themes and unique perspectives of the performance funding policy at Tennessee Technological University. Interview participants are either identified by name (per their individual agreement in signing a specific portion of the consent form), by general title (i.e., administrator, department chairperson, faculty member), or anonymously.

Document Analysis

Documents and records also served as sources of information for the case study activities. Review of items such as mission and vision statements, institutional policy and procedural handbooks, university catalogs, organizational charts, annual reports, performance funding reports, institutional histories or anthologies, and internal memoranda, helped the investigator address research questions and assisted in generating additional questions for interviews (Kuh, Schuh, Whitt, Andreas, Lyons, Strange, Krehbiel, & MacKay, 1991).

Worthen, Sanders, and Fitzpatrick (1997) recommend three reasons for using pre-existing information: 1) it is more cost-effective than original data collection; 2) it is non-reactive or not changed, and stakeholder bias is prevented, in the process of collecting it; and 3) that too much information already collected is used insufficiently. Dobbert (1984) states that analysis of documents is also used to describe and understand the institutional context.

The investigator conducted content analysis of documents as a significant part of the study as a check between written and stated goals and actions relative to the policy at Tennessee Technological University. According to Worthen, Sanders, and Fitzpatrick (1997), content analysis of documents serves as a helpful method to analyze, describe, and summarize trends in numerous types of written documents. Such analysis also provided background for the investigator to improve and refine both research and interview questions to better determine the performance funding policy's impact at Tennessee Technological University.

The investigator initially worked closely with Mrs. Rebecca Tolbert, Associate Vice President for Academic Affairs at Tennessee Technological University, regarding review of performance funding-related documents. Mrs. Tolbert, the person identified as being most directly responsible for Tennessee Technological University's current involvement with performance funding, was named by virtually all on-campus study participants as the primary authority and contact relative to performance funding on campus.

University-related documents utilized extensively by the investigator included the Tennessee Technological University Telephone Directory as well as the institution's Web site and Undergraduate and Graduate Catalogs. Of special interest were Tennessee Technological University's annual Performance Funding Reports for the years 1976-78 (a single document), 1986-87, 1989-95, and 1998-99. Performance Funding Reports for other years were either not located or provided for the investigator as research activities were conducted.

Mrs. Tolbert provided the investigator with three publications she had co-authored relative to performance funding and/or educational assessment within the School of Nursing and the College of Engineering at Tennessee Technological University (Franklin & Tolbert, 1995a, 1995b; Tolbert & Tolbert, 1994). Another study participant, Dr. Marie B. Ventrice, then Associate Dean for the College of Engineering and since retired, gave the investigator a photocopy of a research paper she had written in 1989 about the performance funding efforts in Tennessee and the Comprehensive Educational Reform Act of 1984.

Observations

The investigator also worked with Mrs. Tolbert in regard to gaining admission to meetings relative to discussion of performance funding-related issues. According to Mrs. Tolbert and several other high-level administrators, performance funding is discussed on a somewhat irregular basis during regular Dean's Council meetings. No Dean's Council meetings with discussion of performance funding took place during the time the study was conducted; Mrs. Tolbert indicated that the next such meeting would occur until either at least late November or December 2000.

In describing mechanical aspects of performance funding at Tennessee Technological University, Mrs. Tolbert expressed some historical perspective as to why the campus operates the way it currently does relative to the policy as well as her own belief as to why performance funding exists:

> Several years ago we did have a performance funding committee from people across campus of probably 20 or so, had a faculty member to chair that group. The group lasted almost two years... But it was difficult after a few meetings to get people interested. "This is nice. Thank you for providing this information. Yeah, we'll talk about it a little

> bit and we'll go home. And we'll come back if you ask us to a month later and we'll do something and make some decisions if need be." And so we decided to use the committee structure we (now) have... Every academic area, plus offices of research, library, now planning, is represented there. I may come and meet with that group. If it involves beyond the academic dean's area, then it's with the President's Executive Committee... Then if we have an issue, I may take it to the Faculty Senate if we feel like we need broad faculty input that might (involve) some kind of change in looking at something. And that's probably more affected each year—we will have a committee within a department if it's their year for a peer review... I've not seen right now how going back to a committee, advisory committee, is going to be helpful as need be... You bring assessment up and people just kind of want to run away from it... I think we have to keep at the core, always saying, "Why do we have performance funding?" We have performance funding to improve instruction for students. And we have to *always* keep that at the core.

One general observation involved the varying levels of openness demonstrated by interview participants in the study. Retired individuals and those persons in high-ranking administrative positions appeared more than willing to express what some people may consider controversial responses to questions.

Many faculty members and department heads, especially those preferring confidentiality, were rather cautious and even sometimes nervous about expressing their views on performance funding openly. On several occasions, the investigator was asked by these individuals to stop taping their respective interviews to provide clarification or to consider addressing other issues relative to the performance funding policy.

The investigator summarized information from interviews and documents to compile a case analysis (Kuh et al., 1991). Unstructured observations by the investigator, obtained through activities such as attending meetings relative to performance funding activities, were also slated to be utilized in analyzing cumulative data collected to obtain

a day-to-day perspective on individual and institutional involvement with the performance funding policy (Worthen, Sanders, & Fitzpatrick, 1997). Unfortunately, no such meetings took place during the course of the study.

Lincoln and Guba (1985) make reference to trustworthiness as a means to demonstrate a study's worth to audiences through several criteria: credibility (constructions formed are credible to respondents), transferability (the study is useful in a different context), dependability (reporting of results considers changes over time), and confirmability (data can be confirmed by persons other than the primary investigator). Triangulation, a technique requiring multiple data sources and/or multiple methods of data collection, was utilized to help establish credibility as well as internal validity (do findings match reality?) and construct validity (do items measure hypothetical constructs or concepts?) (Creswell, 1994; Lincoln & Guba, 1985; Merriam, 1998; Yin, 1994). Yin (1994, 1998) states that the most important advantage of triangulation is that it develops converging lines of inquiry; that is, if several different types of sources are used to gather information in a corroboratory mode. Interviews and document and record analysis helped the investigator in establishing both credibility and validity for the study.

Worthen, Sanders and Fitzpatrick (1997) define triangulation as the practice of comparing results from data designed to measure the same construct using different sources and/or different methods to collect such data to increase certainty about the construct's validity. Banta and Borden (1994), prolific authors on performance indicators and performance funding issues, stress the need for triangulation in research activities:

> Rare indeed is the single technique that is sufficiently reliable, valid, and comprehensive to provide all the information needed for making an important decision. Thus, several techniques should be used in a triangulation

> process to furnish a sound basis for judgment (pp. 101-102).

Like Worthen, Sanders, and Fitzpatrick (1997), Kuh et al. (1991) state that transferability requires a thick description of the context of the study so that someone external to the study's findings may assess similarities and differences of applications from one setting to another. Extensive description of research themes and of the setting at Tennessee Technological University, within the confines of preserving the confidentiality of interview participants, assisted the investigator in establishing transferability.

Dependability requires that the researcher must demonstrate evidence of the appropriateness of inquiry decisions made during the study (Lincoln & Guba, 1985). Tuckman (1988) states confirmability means that other researchers using the same procedures to examine the same phenomena in the same setting would likely arrive at the same conclusions. The investigator sought to establish both dependability and confirmability through use of an audit trail (Kuh et al., 1991; Lincoln & Guba, 1985). This audit trail includes all documentation compiled by the researcher such as raw data (audio tapes, interview notes, and documents), ongoing reports of findings and conclusions, and process notes relative to methodology.

Analysis of existing documents provided the investigator with substantial background on performance funding at Tennessee Technological University as well as on the historical changes and culture of the institution itself. This background assisted the investigator in developing questions for later interviews. Information obtained through interviews was gleaned to determine possible inconsistencies; such discrepancies occasionally required further inquiry of participants for clarification.

The study's findings are summarized in Chapter Four. Information obtained through document analysis and interviews were analyzed to determine common themes in responses to interview questions to ultimately determine the long-term effects of performance funding policy at Tennessee Technological University. The investigator's conclusions about the outcomes-related effects of the performance funding policy at Tennessee Technological University and recommendations for further participation and research are presented in Chapter Five.

CHAPTER FOUR

FINDINGS OF THE STUDY

Introduction

This study sought to address three research questions related to the long-term effects of performance funding at Tennessee Technological University. Specifically, the study was conducted to find out:

- What effect, if any, has performance funding had on academic policies and decision making at Tennessee Technological University since the implementation of the performance funding policy in Tennessee?
- What are the strengths and liabilities of the performance funding policy according to current and former administrators and faculty members at Tennessee Technological University?
- What changes are recommended by current and former administrators and faculty members to improve or enhance outcomes relative to the performance funding policy at Tennessee Technological University?

In analyzing information obtained through interviews and documents, however, the investigator uncovered several thematic findings:

- Performance funding has had a positive overall impact at Tennessee Technological University in that institutional leadership has focused policy-related activity on improving academic outcomes before, but not necessarily exclusive of, considering the budget-related incentives of performing well;

- Both awareness of and involvement with the performance funding policy at Tennessee Technological University relate to job position levels within the institution;
- Continuing involvement in the performance funding policy has helped many academic programs prepare for external review activities such as accreditation visits;
- There is a general belief that money earned by Tennessee Technological University as a result of performance funding provides relief from state-funded shortfalls rather than rewards academic units for improving academic outcomes;
- The performance funding policy may currently be operating in maintenance mode at Tennessee Technological University, but it has potential for enhanced exposure because of the new president's emphasis on quality-related concerns in higher education.

This chapter will first address themes relative to information obtained from interviews, documents, and observations at Tennessee Technological University during the summer and fall of 2000 followed by findings related to specific research questions associated with the study. A cumulative summary of findings will conclude the chapter.

The Impact of Performance Funding

Many participants in the study indicated that performance funding has had influence on academic decisions and policies at Tennessee Technological University. Even so, participants did not outright claim that performance funding directly caused any specific major decisions, such as adding or cutting of programs, to be made since the

policy was implemented. Most high-ranking administrators suggested that performance funding has been important in helping the institution make sound fiscal decisions relative to offering quality academic programs.

Dr. Arliss Roaden, former President of Tennessee Technological University and also former Executive Director of the Tennessee Higher Education Commission, highlighted an important theme in stating that performance funding may have had indirect influence on academic decisions related to accreditation and overall academic quality.

> There's no way of saying conclusively and decisively that performance funding had something to do with it... I think there were programs clearly that came under the limelight and under scrutiny based on how strong they appeared and how weak they appeared in relation to the performance funding criteria.

Dr. Roaden pointed out that performance funding was never intended to be a vehicle for adding or cutting programs; it was intended to improve quality. He did not recall that any academic programs at Tennessee Technological University had been cut as a result of poor performance related to performance funding.

Only a couple of interview participants could recall any particular instances when performance funding directly affected the administration of academic programs. For example, Dr. Robert Bell, President of Tennessee Technological University, provided a brief historical perspective on changes in academic programs since performance funding began and how he believes it has influenced academic decision making at the institution. Specifically, he said, "There have been significant curricular changes. Have they been based largely on performance funding? I doubt we could say that... Clearly there are elements of performance funding that have had a big impact on curricular change."

In following, Dr. Bell provided a synopsis of curricular changes that he thought came about as a result of peer review and performance funding. He indicated that one undergraduate academic unit consolidated from 17 different majors down to four and eight different graduate programs consolidated down to two.

Mrs. Rebecca Tolbert, Associate Vice President for Academic Affairs and also considered by all interview participants as the person most primarily responsible for reporting on performance funding at Tennessee Technological University, provided the investigator with a specific instance by which performance funding affected an academic decision directly. According to Mrs. Tolbert, accounting students were consistently scoring low on major field examinations. After a review of the curriculum and the course content, she said, governmental accounting course work was increased to help make up for low scores on national examinations.

Dr. Bell commented extensively about the performance funding policy's impact on academic endeavors. He indicated that while the policy is "not perfect" and approaches assessment in "fairly broad brushes," it does push institutions "to provide inputs to the funding model that are focused on outcomes." Dr. Bell asserted that curricular review and classroom instruction have improved since the policy was implemented.

The late Dr. Norman Williams, then Interim Dean of the College of Business at Tennessee Technological University, stated that the performance funding policy "does ask that we set certain goals and try to obtain certain levels... If for no other reason it makes us more sensitive to review some of this and say, 'Okay, are we really doing this or are we (just) talking about it?'"

Dr. Wallace Prescott is Provost Emeritus at Tennessee Technological University and was a member of the Tennessee Higher Education Commission's initial advisory group associated with the performance funding policy. He commented how he believes performance funding directed Tennessee Technological University to be increasingly budget-conscious in making decisions about academic programs:

> I think performance funding causes us to look more carefully at the initiation of new programs. We look at a program and say, "What are the projected number of majors in this program? How many graduates could be expected per year?" And unless we could be fairly optimistic, we were very careful not to just jump and initiate a new program because somebody wanted it. We were trying to put the dollars where they were generated.

High-level administrators tended to consider how performance funding impacted "big picture" academic concerns at Tennessee Technological University such as accreditation and quality. Lower and mid-level administrators, particularly non-academicians and department chairpersons, claiming to have relatively little knowledge of or responsibility for performance funding activities, tended to provide very vague responses to how performance funding has affected academic decisions at Tennessee Technological University. In fact, most department chairpersons felt relatively unaffected by the policy. One department chairperson highlighted this point by stating, "I don't see performance funding being a factor except for new programs and maybe some new majors. But the university as a whole, the curriculum has not changed drastically."

One department chairperson was rather adamant in claiming that, overall, performance funding has not had a significant impact on individual academic units at Tennessee Technological University:

> No, (performance funding has) not (had an impact) with the (academic) department... Probably because of the small increase of money it has brought to the university, some people have been able to do a little bit that they might not have been able to do otherwise. The pressure to score well in the areas that are of consequence for the system—criteria has meant that certain departments have been strengthened. Ours was not and it's probably connected to the fact that we're not a discipline that has any kind of outside accreditation...

Dr. Roaden argued that institutions must demonstrate proper stewardship of state dollars, even if the amount is deemed insufficient, before expecting adequate funding from the legislature:

> Many people said, "Well, you need to fully fund the (traditional funding) formula before you start talking about quality." But I personally think it's the other way around... Once we were able to show that not everything in higher education in Tennessee was a failure and (that) some things were superb, legislatures were very sympathetic then to providing more funding for meeting basic needs as well as providing for capital needs in higher education.

A handful of interview participants thought that performance has provided an avenue for Tennessee Technological University to publicly demonstrate or announce its high level of quality. Dr. Roaden provided a typical response:

> Performance funding made it possible for us to expose in the public arena many of the fine things that Tennessee Tech was doing... At least initially on performance funding measures it scored highest for the first few years and is still quite competitive with the University of Tennessee at Knoxville in meeting those standards.

A Tennessee Technological University press release dated February 15, 1996 highlighted student satisfaction with their educational experiences compared to other public higher education institutions in Tennessee. Statements in the document were based on a survey instrument administered to 2,476 sophomores, juniors, and seniors as part of data-collection requirements associated with performance funding. While not specifically addressing attitudes and perceptions toward the performance funding policy itself, the press release was clearly used to recognize what administrators believed indicated perceptions of quality among students—education, involvement, personal development, learning, advising, and curriculum and instruction. Both Dr. Volpe and Mrs. Tolbert were quoted in the press release, which went into significant detail about assessing quality through student outcomes and how Tennessee Technological University scored higher than all other public higher education institutions in Tennessee on the six areas surveyed.

Dr. Bell gave performance funding a "high grade." Even so, he questioned if the policy maximizes desirable measurement of academic outcomes. According to Dr. Bell, "Is it (the performance funding policy) doing everything we want it to? I doubt it and I think five years from now we'll be doing it differently than we are now." Several interview participants who have worked directly with the policy for an extended period echoed Dr. Bell's point that the policy will continue to evolve—as changes in governance and resources occur.

Dr. Williams commented on both accountability and value-added issues relative to the performance funding policy's future at Tennessee Technological University:

> The legislature (is) going to expect more and more... I don't think we can any longer sit back as faculty members

> or administrators and say, "Hey, we are here, we'll do the best we can." No, we're going to have to look at, okay, we got this product at this point when you're a freshman, now where did we carry this person? And we've got to show that we moved this person to a certain level.

Based on previous experience, some interview participants presented cautiously positive views of the value of performance funding, stating that the policy helps identify major areas in which faculty and staff should concentrate. These individuals were quick to add, however, that quality is both important and difficult to measure, and that "you cannot just go by the numbers" to make judgments about academic programs. Mrs. Tolbert, for example, stated that Tennessee Technological University tends to "use the results sometimes in ways that are really probably inappropriate," commenting that quantified outcomes are even utilized as "gospel" at times. She also went into some detail about a former weakness of utilizing major academic field examinations as part of the performance funding process:

> Used to (be), if you had 10 students and you tested in a major field test and they had a low score, they counted as much within that program as your 250 or 300 engineering students... Now that's not true and we got that band of significance in there. We didn't have to be above the national mean. You could be within that band of significance before you started losing out... One other weakness is you start (then) instead of *when* is it the best time to do this peer review or the best time to do this testing. Okay, who's going to hurt us the least and we'll do them first. And then who might have low scores and we'll wait and do them later because you don't want a low score to affect you for five years. So you're, for lack of a better term, playing games perhaps, with scheduling.

Several interview participants cautioned that potential excessive monitoring of institutional progress could lead to institution's employing learning strategies that "teach to the test" in individual classroom settings. As Dr. Williams of the College of Business

put it, "If it becomes common practice that we're giving a field exam to only a subset of students, then this becomes common knowledge and two or three schools do it, then that's going to start taking from it—from the program—and it won't be very meaningful." Dr. Williams added that performance funding may rely to much on campuses using "honor system" appropriately.

Similarly, Dr. Dean Richey, a faculty member and former Associate Dean of the College of Education, commented that internal dishonesty is a risk in utilizing the performance funding policy:

> A strength can also be a weakness; that business about everyone's (being) sort of held to the same guidance on how to do the benchmarks. Obviously, you can write them in ways that make them pretty insignificant and not really challenging and not good goals and we struggle with that...

Several study participants wondered if indicators associated with performance funding were more-or-less coincidental with program revisions that may have occurred naturally as academic disciplines changed. One academic department chairperson, for example, posed the following:

> I don't believe we're doing anything different than we would have been doing right along... And for the whole time I've been here, the emphasis has been on maintaining quality or achieving greater quality and so performance funding hasn't been a cause of anything. It's sort of parallel to what we were doing anyhow...

Dr. Angelo Volpe, the most recent former President of Tennessee Technological University, also commented that substantial curricular changes had occurred "... not necessarily in response to performance funding, but just in the natural course of events." He and several other interview participants also cited the expansion of doctoral programs as an area of significant change. Dr. Volpe also added that, while performance funding

may have had limited influence on curricular actions, the amount of money it generates annually toward an $80 million budget is "... not going to be exactly dictating how the university operates."

One high-level administrator suggested that, as an institution, Tennessee Technological University may be missing out on opportunities to promote improvement in academic outcomes. According to this individual, "One of the hazards of performance funding is that it may inhibit experimentation—taking a chance. Daring to do something different and not really knowing what the results will be. Getting into areas where measurements may be more difficult or not established." This individual alluded to the idea that performance funding may in fact force institutions to become more alike rather than develop their own unique identities.

Senior administrators at Tennessee Technological University cautiously state that performance funding has had a positive significant impact on improving and monitoring academic programs. Faculty members and academic department chairpersons do not necessarily disagree with these administrators, but they do not appear to necessarily be part of an active process to assess student learning and achievement. Certainly the performance funding policy has helped strengthen academic programs that experience periodic accreditation reviews and it appears to be influencing other academic units that are undergoing external peer reviews. Monetary benefits of performing well relative to performance funding, while deemed helpful for general budget needs, do little to address overriding funding problems at Tennessee Technological University.

Awareness and Involvement

Significant differences exist at Tennessee Technological University as to the levels of involvement individuals report relative to the performance funding policy. High-ranking university officials generally reported that performance funding permeates many levels of administration and faculty groups whereas most academic department chairpersons and faculty members claimed to have little or no involvement with the policy.

Knowledge of and interaction with the performance funding policy appear to diminish at Tennessee Technological University in the communication chain somewhere between academic deans and department chairpersons. This information gleaned from interviews indicates that much of the administrative and information reporting functions relative to the policy are addressed at the dean level and appears to be less relevant or understood below the dean level. Few faculty members and academic department chairpersons understood the policy and these individuals often asked the investigator for clarification about or explanation of the policy during interviews.

In reviewing historical documents related to performance funding at Tennessee Technological University, the investigator discovered a significant amount of information through which the concept of performance funding was communicated to the campus community. In particular, the "Final Report for the THEC Performance Funding Project at Tennessee Technological University," filed in July 1978, expresses with considerable depth a chronology of activities involving faculty and other members of the academic community in identifying instructional goals and performance indicators as well as in

acquiring data to be incorporated into the project. Among other items, the 1976-78 Final Report includes:

- A copy of a Tennessee Higher Education Commission brochure/flier highlighting the purpose of the Performance Funding Project,
- A listing of 13 faculty members and administrators involved in the preparation of the 1976-78 Final Report,
- A listing of project activities (including related research opportunities),
- A copy of a questionnaire mailed to alumni as part of the data collection process,
- Copies of two letters sent to faculty from Dr. Richard Dumont, Tennessee Technological University's Performance Funding Project Director, requesting participation through completion of a faculty questionnaire, and
- Summaries of activities relative conducted for the purpose of evaluating performance funding at Tennessee Technological University and recommendations for future participation.

Most annual performance funding reports the investigator reviewed following the initial 1976-78 report primarily summarized Tennessee Technological University's scores relative to performance indicators. Over time, the performance funding reports have become more brief and include fewer and fewer support items for documentation of results; it appears that the reporting process has become increasingly streamlined or at least shorter over the past 20 years. Hand-written notations on official reports occasionally accompanied total dollar awards stated for given years as well as altered scores on performance indicators occurring in discussion with the Tennessee Higher

Education Commission in efforts to provide similar reporting patterns across public colleges and universities.

Dr. Leo McGee, Associate Vice President for Academic Affairs and at one time directly responsible for data collection involved with performance funding at Tennessee Technological University, discussed how he believed changes had occurred because of increasing campus involvement with the policy:

> I think at our campus (changes have been) more attitudinal... I think if you exclude the earlier years where administrators like myself really just kind of did it; you know, make sure we address the criteria of the instruments and not really involve the faculty, not really involve the academic units, we probably wouldn't have made a significant difference in it, but now we're involving departments and the faculty more. I do think it's focusing more on the outcomes of the academic program and students' satisfaction.

Not all participants agreed with Dr. McGee. Four individuals stated that department chairpersons and faculty members still have little, if any, knowledge about performance funding. One participant opined that faculty were much more involved in the process when performance funding began than they are now. Two participants also stated that performance funding has improved in that it has gradually built better links between planning and budgeting, both at the campus level and among institutions associated with the Tennessee Board of Regents.

A response from Dr. Richey of the College of Education, for example, alludes to the point that most faculty members probably know little or nothing about what performance funding is designed to accomplish:

> For the most part, the faculty didn't have any understanding, nor seemed to have any need for an understanding, of performance funding. We just kind of

> knew it existed, but from the faculty perspective I didn't really pay any attention to it. It was only when I came to the associate dean's office (as an administrator) that I began to need to look at that and understand it.

Dr. Ventrice of the College of Engineering voiced strong concerns relative to what she felt is a lack of sufficient academic discipline-level input. She believes that the biggest weakness of the performance funding policy at Tennessee Technological University is that there is not enough communication between upper administration and "where the action is" in the classroom. Dr. Ventrice stated that, "To be expedient, they (upper administration) sometimes do certain things (e.g., set achievement goals) without what I would consider appropriate discussion or consultation."

Based on documents and some interviews, initial participation with the performance funding policy at Tennessee Technological University involved many people across the institution. It also clear, however, that over time faculty and academic department heads have not been very involved in determining specific goals and objectives associated with the policy.

Peer Review and Accreditation

Almost without exception, interview participants indicated that performance funding has assisted Tennessee Technological University in preparing for external peer reviews and accreditation visits. In particular, some participants mentioned that much of the information needed for performance funding reports was either the same or very similar to information necessary for external reviews and accreditation.

Numerous interview participants offered specific instances in which performance funding supports and enhances preparation for accreditation in their respective academic

disciplines. Specific to his previous experience as Dean of the College of Business at Tennessee Technological University, for example, Dr. Bell offered the following:

> I'm on the candidacy committee for AACSB, the American Association of Collegiate Schools of Business... Our last review, we were loaded for bear on most of their outcome measures. And I have no doubt that's largely because of the performance funding framework. AACSB has made a major shift from measuring inputs to measuring processes and outputs, and with that kind of framework, performance funding is a big advantage to a college when it's going into an accreditation review.

Similarly, Dr. Ventrice commented about the benefits of performance funding at Tennessee Technological University specific to discipline-related concerns within engineering, focusing on the compiling and reporting of data:

> ABET, the Accreditation Board for Engineering and Technology, has gone to a new method of looking at institutions and deciding whether they should be accredited or not and it absolutely requires the same kind of thing that performance funding has asked for... You can break out subsets for engineering and we can use that in our engineering accreditation process... Some of the things that ABET is requiring for engineering accreditation you can pull out of the alumni survey.

Both Dr. Bell and Dr. Roaden similarly discussed the importance of the performance funding policy's impact on assessment relative to accreditation visits and external reviews, even for academic areas that do not have accreditation. Dr. Bell, for example, stated that

> Performance funding takes you somewhere that unique accreditation efforts in the colleges don't take you. Some colleges, pretty deep into accreditation, have gotten a lot of national attention. Others, like Arts and Sciences, don't have accreditation typically for their disciplines in the college and, other than SACS (the Southern Association of Colleges and Schools), there isn't a lot of feedback that

> would routinely come. But (the) performance funding framework has given us a good feedback system for that.

Dr. Ventrice also discussed what she believed were aspects of performance funding that were detrimental to engineering education concerns. She indicated that performance funding, while valuable for assessment activities, evaluates "all (academic) programs" generally and that some questions associated with performance funding are inappropriate for an engineering program.

One department chairperson was rather adamant in arguing that, despite small improvements in academic programs that have accreditation processes, performance funding has not had a significant impact at Tennessee Technological University. This participant stated that while some academic departments have been moderately strengthened because of performance funding, the disciplinary area this person was in actively seeks to improve student academic performance despite the lack of formal accrediting concerns.

That same department chairperson questioned accountability aspects of performance funding at considerable length, indicating that accountability in higher education is both "misdirected" and a "current kind of vogue" stemming from the business community.

> We are not easily accountable for what we do in any way, shape or form... It's connected with a lot of things that have come out of the business world that I think are totally inappropriate... The university as it seems to me has to be accountable to a certain degree but not in the sense of product accountability.

A question that frequently was posed to the interviewer by administrators was whether or not the performance funding policy adequate addressed "uniqueness of

mission" among institutions. For example, President Bell had concerns regarding the framework of the performance funding policy relative to the selection of peer institutions. Dr. Bell indicated that of the original group of 10 peer institutions selected by the Tennessee Higher Education Commission for Tennessee Technological University, seven did not have an engineering school. He indicated that the current framework has some common peers among the Board of Regents' institutions as well as some unique peers, but he believes the unique peers have been poorly chosen to this point. Former President Roaden alternately stressed that accommodating an institution's uniqueness of mission often means comparing institutional outcomes against results within the institution in previous years.

Most study participants claimed that performance funding likely was instrumental in the increase of the number of accredited academic programs. Before the inception of performance funding in Tennessee, fewer than 50 percent of programs eligible for accreditation at Tennessee Technological University as well as across the state were in fact accredited, according to Dr. Roaden. Dr. Roaden stated that the rate had increased to somewhere between 90 and 95 percent at Tennessee Technological University within 10 years after performance funding was implemented.

Dr. Roaden also commented on how the State of Tennessee has been a forerunner in terms of institutions publicly assessing academic outcomes as "performance funding opened higher education up to public scrutiny." As demonstrated by the following statement, Tennessee was perhaps the first state to actively take a hard look at how well public higher education was doing in terms of demonstrating student academic progress.

> Lots of other states wished Tennessee hadn't been so successful at performance funding because they didn't want

> it... We started when we didn't know it wasn't appropriate to assess how well you're doing in higher education. Other institutions of higher education say, "Hey, that's not an appropriate question to raise, what kind of job we're doing." Of course it's appropriate. You can always raise questions about how you measure effectiveness in higher education.

Performance funding has undoubtedly had a high level of influence on activities associated with accreditation and peer review of academic programs at Tennessee Technological University; increasing overlap in data required for all of these processes is becoming obvious, making administration of accreditation efforts easier to administrate. It is also apparent that most academic programs have generally been strengthened over the course of the performance funding policy's run at the institution.

Performance Funding Money and Its Utilization

Potential money to be earned from performance funding does not in and of itself necessarily drive Tennessee Technological University to participate in the policy. On the contrary, performance funding is largely perceived by members of the Tennessee Technological University community as a means to improve educational outcomes first and to provide a small amount of "incentive" funding second. As an example, Dr. Roaden noted that

> The first year Tennessee Tech got, as a result of the scores on performance, something over $700,000. It's not a lot of money, but it was like manna from Heaven and that's money we would not have had. No way we would have had that money without performance funding. Now you don't go into performance funding because you get more money, but you sure don't stay out of it, either...

Dr. Roaden said that some states require that money earned by institutions as a result of performance funding be put into the ongoing development of measures of

quality and improvements. He indicated that the State of Tennessee never earmarked performance funding dollars and that he directed money earned by Tennessee Technological University to the institution's general fund. According to Dr. Roaden, "Every faculty member and every student at Tennessee Tech profited from that additional money. I'm satisfied if I'd set it apart for some special purpose it would have caused problems on campus that... could have worked to the detriment of (preserving) performance funding." He thought that splitting up performance funding money would have likely caused political infighting between academic disciplines and also would have diluted the overall impact of money gained from performance funding activities.

Dr. Richard Troelstrup, a former faculty member in the Department of Psychology and a member of the first committee working with performance funding at Tennessee Technological University, indicated that data collected "validated some feelings on the part of the faculty that we were doing a good job and the students were learning. I don't think the money made that big of a difference because it's hard to say where the money went. It went into the general budget and I think some went into faculty research grants."

Documents such as newspaper clippings about and reports of faculty mini-grant awards were included with Tennessee Technological University's Performance Funding Reports in 1989 and 1991. Though never specifically mentioned, one assumes that money utilized to fund these grants, with annual cumulative totals of $13,857 and $10,476, respectively, came about as a result of performance funding. This thought would be consistent with Dr. Troelstrup's response that some of the money Tennessee

Technological University received from performance funding was used to fund mini-grants.

Weaknesses of performance funding expressed by virtually all interview participants often related to the level of funding involved. A department chairperson was rather succinct in voicing perspective on the monetary aspect of performance funding:

> It's too little money to do very much. It certainly doesn't filter down beyond certain targeted areas in the university. The overall impact of it is pretty minor... It has been meager enough that it's probably slightly beneficial, but it certainly is nothing that has jerked the university into some new step or new level. What it tends to do is put out fires and it allows us (the university) to tackle some very specific problems.

Former President Volpe suggested that money used as a financial reward is not very significant since full formula funding has not existed. He added that institutions should be able to earn more than up to five-and-one-half percent of the state allocation and that Tennessee Technological University might benefit more than many other institutions because it has always performed well relative to performance funding indicators.

According to Dr. Volpe, "Performance funding may incrementally increase (in terms of dollars provided and percentage of budget available), but it's never going to get to the point where you're going to say, 'Hey, now you're really making an impact with it.'" Despite this perspective, Dr. Volpe also indicated that, "Overall, performance funding has been a good thing these past 20 years... We just don't have the grease to allow it to work, because right now, it's a good plan, but it's not nearly funded enough."

One department chairperson expressed significant indignation with respect to not receiving any financial support for a particular academic unit despite that department

consistently serving the institution well relative to the performance funding policy. This individual was extremely direct: "(Money from performance funding) is for the general fund and to most faculty that's a black hole... What am I going to get out of this? Nothing... Do I get travel? No. Do I get a new computer? No. Do I get my office painted? No." This interview participant represented sentiments similar of several academic department chairpersons.

While acknowledging Tennessee Technological University's perceived long-term success relative to performance indicators, Dr. Yarbrough of the Department of Chemical Engineering discussed his thoughts on how performance funding, in addition to formula funding, has failed to fully address Tennessee Technological University's funding needs:

> I don't think it's (performance funding) had any effect at all... We would be happy to get what the (traditional) funding formula provides rather than some fraction of it. I'm not even sure what the (performance) funding formula does for us in terms of whether it's a setback or an addition to the funding formula... Financially, I don't know that it's done anything for us; that is, for the university or the department. I certainly would not believe that we've ever gotten 15 cents in the department...

Dr. Prescott, Provost Emeritus, expressed somewhat similar sentiments about the current state of performance funding in Tennessee from a monetary perspective, noting that current efforts to provide additional resources for public higher education may fall short of the mark. "I think with the present level of funding, there's just a matter of trying to keep things together and there's just not a lot of latitude to allocate special funds for special purposes, even based upon performance. It seems to me that everything is just in a maintenance mode."

Another interview participant had a suggestion as to how the performance funding policy could be improved at Tennessee Technological University:

> If money was not so tight across the board and it would be possible for departments to try things which they hadn't been able to try before—connect those to performance funding and actually have the use of money that came in, but the way the budget is now and has been for the past few years, there isn't a penny for anything extra. The big problem is: How are we going to make it through next week?"

Dr. Volpe said that the State of Tennessee needs to support the performance funding policy at a higher level: "Increase the funding. That's probably the bottom line, and make it a bigger percentage of what the institution's budget is."

Dr. Yarbrough similarly emphasized that performance funding, while providing some financial rewards for academic improvement, would be more meaningful if the rewards were higher:

> If it (performance funding) increased the budget of the university 10 or 15 or 20 percent, if that was the scope of things, then I believe it would really have some effect... Five percent's not insignificant, but people would get a lot more excited about it if it was really going to be an addition to the fully funded formula.

Interview respondents at virtually all levels agreed that monetary rewards based on performance funding results were welcome, but that its level of meaningfulness will always be diminished until the State of Tennessee fully follows the traditional funding formula. Until that time, the performance funding policy will be viewed by interview participants as a means to earn a small portion of what they believe the institution should already be getting. Without rerceiving the financial reward, many participants believe that performance funding assessment activities are not much different than other

evaluation activities they would undertake anyway. Some participants also believe that performance funding may be a policy that better served Tennessee Technological University the 1970s and 1980s, when overall funding was judged to be significantly better.

Administrative Leadership and Performance Funding

The performance funding policy at Tennessee Technological University has been a significant funding issue for upper-level administrators since being implemented more than 20 years ago. The two previous university presidents, Dr. Roaden and Dr. Volpe, and the current president, Dr. Bell, all provided unique insights about the policy's history and impact at the campus. Other administrators working with the policy on more of a day-to-day basis, such as Associate Vice Presidents for Academic Affairs McGee and Tolbert, commented extensively on processes involved with carrying out the policy.

Dr. Roaden demonstrated an obvious sense of ownership of the performance funding policy, perhaps stemming from his experiences at Tennessee Technological University and with the Tennessee Higher Education Commission; he was very philosophical about the policy's initial goals associated with accountability. Dr. Volpe, however, focused more on funding-related issues and, in particular, the state's general lack of financial commitment to public higher education. Both Dr. Bell's background and comments clearly indicate that he plans to pursue performance funding more aggressively from a quality assessment perspective.

Intended or not, many individuals participating in the study have utilized performance funding scores as a means of comparing Tennessee Technological University to other public higher education institutions in Tennessee, particularly, the

University of Tennessee at Knoxville. Like many interview participants, Dr. McGee emphasized the importance of competition among institutions, as a means to gage improvement, is a positive aspect of performance funding in addition to improving outcomes:

> We perceive ourselves as being in competition with the other institutions in the Board of Regents and then to some degree in competition with the University of Tennessee... Perhaps we're more concerned about the outcomes and really just trying to do a better job with what we are asked to do and performance funding kind of sets assessments, sets improvement instruments, and so it's causing you to kind of check yourself to see how well you're doing.

Mrs. Tolbert also mentioned that, over time, the performance funding policy at Tennessee Technological University has become less burdensome:

> We try to make the performance funding activities not too painful... We expect a 20- to 30-page self-study, not a 100-page study... Where were you five years ago? Where are you now? What do you need to say about it? And what are your outcomes and what are you going to do about it? I think dovetailing performance funding with expectations of accrediting have probably been very facilitative.

Administrators who worked with performance funding at or near the policy's inception at Tennessee Technological University seem generally pleased with policy's development over time. Dr. McGee, for example, indicated that as long as the performance funding policy is reviewed and altered every five years, there is ample time to determine if ongoing changes work or not. Dr. McGee put it this way: "It's not broken." Similarly, Dr. Ventrice, now retired Associate Dean of the College of Engineering, commented that the Tennessee Higher Education Commission has done a "reasonably good job" of modifying and updating the performance funding policy.

Clearly, the reporting process for performance funding at Tennessee Technological University has become shorter over the years. Without a formal committee in place to oversee the policy, Mrs. Tolbert has helped develop a process that efficiently collects performance data. What appears to be lacking, however, is a consistent level of understanding and participation from faculty members and department chairpersons about establishing appropriate and meaningful goals for academic improvement by students.

From an administrative standpoint, one of the more informative documents at Tennessee Technological University regarding improvement specific to the performance funding policy was contained within the institution's 1994 Performance Funding Report. Of the reports reviewed this study, this report was the only one that included a brief mid-year report outlining identified weaknesses and proposed actions to be taken to address potential problems for the final report submitted several months later. Of the 10 performance standards being considered by the Tennessee Higher Education Commission at that time, the mid-year report specifically addressed concerns in seven:

- Standard II—Major Field Tests (health and physical education students were scoring 11 points below the mean on the National Teacher's Examination): Efforts were to be made to improve scores in the department and to maintain other scores on the exam above the national mean.
- Standard III—Alumni/Student Survey (cultural/arts experiences and understanding of different philosophies and cultures were below the state average): Efforts were to be made to combine ongoing activities to encourage increased participation in cultural and arts events and to improve the diverse

makeup of the campus and the interaction with and understanding of other cultures.

- Standard IV—Accreditation (programs in home economic and fine arts were not accredited): Efforts for these programs to become accredited were to focus on maintaining faculty with adequate credentials and developing stronger curricula.
- Standard V—Undergraduate Peer Review (the computer science program was not accredited): Efforts for this program to become accredited were to focus on curricular revision and improved support services for instruction.
- Standard VI—Master's Program Reviews (numerous weaknesses were determined to exist in the College of Engineering): Increased efforts were to include providing additional program, curricular, and research information, improving reporting of budget needs, and enhancing relationships between research centers and academic departments.
- Standard VII—Enrollment Goals (African American student enrollment was below the established goal): Efforts were to continue activities taking place relative to recruitment and retention.
- Standard VIII—Retention (goals were barely met and retention decreased the previous three years): Efforts were to be focused on fully implementing the university's retention plan.

It is interesting to note that Tennessee Technological University's total score on performance indicators was 94 out of 100 points in 1994, the highest of all four-year public higher education institutions that year (Bogue, 2000). According to its 1994

Performance Funding Report, Tennessee Technological University scored a perfect 10 on seven of the standards; the exceptions were Standard IV—Accreditation (7 points), Standard V—Undergraduate Peer Review (9 points), and Standard VI—Master's Program Reviews (8 points). On Standard VII—Enrollment Goals, the Tennessee Higher Education Commission awarded Tennessee Technological University an additional 2 points to provide consistency with performance reported at other public higher education institutions; thus the institution received the full 10 points possible on this standard. While performing at a very high level compared to other institutions, Tennessee Technological University appears to have had a solid understanding of its areas of weakness relative to the performance funding policy.

Except for the mid-year Performance Funding Report filed in December 1993, the investigator was unable to locate documents relating to improvement- or future-related activities associated with performance funding at Tennessee Technological University. Most documents utilized for this study made reference to planning when performance funding was being implemented in the 1970s or to reporting of score results based on existing performance standards of the policy.

Former President Volpe's perspective on improving Tennessee's performance funding policy relative to all participating institutions was succinct, calling for better financial recognition of excellence from the state. His thoughts seemed specific to Tennessee Technological University, however, as he also stated that there needs to be "some way to not penalize those (institutions) that are going from superior to outstanding as compared to those who are going from good to superior." Like many interview

participants, Dr. Volpe believed that Tennessee Technological University was already a strong academic institution before performance funding was implemented.

An interesting point was made by a department chairperson who discussed previous incongruities between the planning cycle for Tennessee Board of Regents institutions and performance funding cycles. This individual mentioned that both the Tennessee Board of Regents and the state's performance funding policy had five-year planning cycles, but that they did not coincide with each other, often making data collection both redundant and cumbersome. When cycles were re-configured in 2000, this chairperson said, facilitation of the two programs now makes more sense from an operational standpoint.

While responses were diverse, interview participants agreed that performance funding on Tennessee Technological University's campus will maintain, if not increase, in its importance. Much of this belief is due to the installation of Dr. Bell as President in July 2000. Many interview participants were aware of Dr. Bell's work with quality-related concerns at both the state and national levels and said that his interests would naturally coincide with improvements sought in performance funding. Both Mrs. Tolbert and Dr. Ventrice provided comments that were representative of several interview participants. Mrs. Tolbert made reference to President Bell's professional background and commitment to quality management and to comparisons between performance funding and quality concerns. She believes that he understands the "total quality experience" and "the similarities and differences between it (total quality management) and performance funding." Dr. Ventrice stated that, "Tennessee Tech would be very

enthusiastic about continuing on with performance funding and doing well. It just matches the philosophy of Bob Bell."

Dr. Bell himself echoes this line of thought:

> It's (performance funding) something I want to continue to refine and expand. I'm a Malcolm Baldridge examiner for the Department of Commerce... I'm going to continuing to grow our focus on outcomes and results and on processes and things I think performance funding does a great job of taking us partly there. It's not perfect, and there are things we'll want to do that are unique to Tech that will not be part of that model, but I think there's no question it's going to help us...

Dr. Bell also provided an overview of how he hopes to influence Tennessee Technological University's participation in the performance funding policy. Specifically, he considered the challenges of building a strategic framework for the university by linking assessment, feedback and funding "loops" within academic units. Dr. Bell alluded to the idea that his experience as an academic dean prior to being President will help him in understanding how to develop such a framework among academic departments and ultimately enhance campus-wide participation in the performance funding process.

Performance funding will likely have an increasingly important profile on Tennessee Technological University's campus. Dr. Bell undoubtedly has a commitment to quality-related concerns and his interest in that area should expand given his new role as President. What is questionable from an administrative standpoint, however, is how the campus community will respond to increasing calls for accountability.

Research Questions

In addition to describing themes relative to the long-term effects of performance funding, the investigator was interested in reviewing how interview participants cumulatively answered individual interview questions so that important themes could be further documented. This section of the chapter will report and analyze general responses to specific interview questions associated with each of the study's three overall research questions.

Research Question One

What effect, if any, has performance funding had on academic policies and decision making at Tennessee Technological University since the implementation of the performance funding policy in Tennessee?

Interview Question I involved participants identifying what factors they thought led to Tennessee Technological University's involvement with performance funding. Several respondents identified more than one factor. The most common response was that participants did not know why the university became involved with performance funding in the 1970s; seven of the 18 respondents (39 percent) indicated they had no knowledge on this matter. Following is a listing of all responses as to why the university initially participated in the Performance Funding Project:

Don't know	7
Opportunity to brag about campus quality/ Public recognition of Tennessee Technological University's accomplishments	4
Tennessee Technological University's central administration was interested in performance funding	3

The Tennessee Board of Regents expected Tennessee Technological University to participate	3
There was a possibility of additional funding for Tennessee Technological University	3
Accountability for academic outcomes	2
The Tennessee Higher Education Commission was interested in performance funding	1
The Tennessee legislature required participation in the Performance Funding Project	1

Most interview participants were very vague with their responses to Interview Question I. Many either admitted or acted as if they were unsure why Tennessee Technological University became involved with performance funding; some of these individuals were not working at the institution when the policy was implemented. Individuals who tended to be more confident in their responses tended to be senior administrators involved with the actual implementation of the policy at Tennessee Technological University.

Interview Question II asked participants to consider if pressing academic issues existed when performance funding was initiated in the 1970s. The investigator was interested in determining if particular concerns on campus during that time had any significant impact on Tennessee Technological University's involvement with performance funding. Responses to this inquiry were as follows:

There was an emphasis being placed on enhancing graduate programs/research (i.e., business and engineering)	6
There were no pressing academic issues at that time	5
Don't know/no answer provided	4
Campus movement toward accreditation/ changes in academic qualifications were becoming apparent	2

The campus was looking for opportunities to brag about its quality	1

When asked in a follow-up question about the university's financial status when performance funding began, respondents associated with the institution in the 1970s often made reference to "the good 'ole days," stating that the institution probably did not realize how well it was funded then as compared to the present. Some of the pressing financial needs at Tennessee Technological University in the 1970s identified by some participants included funding for the library, equipment, salaries, and research start-up activities. One respondent indicated that most financial concerns were addressed through cost controls rather than through acquisition of new monetary resources.

Interview participants were fairly evenly divided on Interview Question II when asked to state whether substantial curricular changes had occurred at Tennessee Technological University since performance funding was implemented in the 1970s. Eight respondents, or 44 percent, indicated that significant changes had occurred. Seven respondents, or 39 percent, indicated no significant changes had taken place. Three individuals (seven percent) indicated that they were either not sure or did not know if substantial changes in curricula had occurred.

Interview participants stating that curricular changes had occurred gave varying examples of such changes, including:

- more emphasis toward classroom technology,
- more emphasis on understanding of world cultures,
- consolidation of academic programs,
- the addition of a doctoral program in education, and

- a change in academic scheduling from the quarter system to the semester system.

One individual did state that performance funding had an impact on the peer review process of academic programs while another indicated that curricular changes reflected changing attitudes toward academic improvement as demonstrated by outcomes. No interview participants were aware of any particular academic programs that had been reduced or cut as a direct result of poor results relative to performance funding standards.

Seven interview participants responded directly as to whether curricula changes were related to performance funding. Two individuals said there was a relationship between curricular changes and performance funding and five persons did not think so.

Interview Question III asked interview participants how they thought state allocations to Tennessee Technological University had changed since performance funding started in the 1970s. Responses among the participants were rather varied:

Scoring high on performance funding has helped add budget dollars	4
A lack of funding for formula funding decreases the importance of performance funding	3
Some budgetary improvements have been made because of performance funding, but the dollars would probably still exist	2
Formula funding was just used to fund performance funding; institutions have to earn the money back	2
Institutions with increasing enrollments have benefited the most from performance funding during the last 10 years	2
Performance funding money is not enough to make a significant difference; it does not benefit academic departments	2
Don't know	2

In essence, there was confusion among several participants as to how performance funding allocations to Tennessee Technological University were made. Of particular interest was that some participants were under the impression that performance funding involved "earning back" some budget dollars that were not fully funded by the state's traditional funding formula. Others were not sure if performance funding money was an "add-on," as is the case, or if it was something that had been taken away initially and was to be earned back by scoring well on performance funding indicators.

Regardless, most interview participants felt that the amount of money earned through performance funding was insufficient to make any kind of substantial difference in how the institution operates. Several respondents representing high-level administrators as well as department chairpersons and faculty members indicated that performance funding would have more impact if the state simply funded the traditional funding formula at 100 percent for base needs and then considered performance indicators to determine "incentives" for improvement in academic outcomes.

As a follow-up to Interview Question III, interview participants were asked if they thought that overall university funding would be any different if performance funding did not exist. In essence, most interview participants did not provide confident or definitive responses as to whether they thought funding would be different without performance funding. As such, it is not surprising that responses again varied considerably:

Performance funding provides money that would otherwise not be available to Tennessee Technological University	6
It is questionable if overall funding for Tennessee Technological University would be worse if performance funding did not exist	5

Overall funding for Tennessee Technological University would not be any different if performance funding did not exist	4
No direct response	3

Interview participants were extremely varied in their knowledge levels of and their opinions about the effects of performance funding at Tennessee Technological University. Persons directly involved with the policy, particularly since its inception, were very well aware of the policy's overall goals; most of these individuals were high-level administrators or had served on the initial committee that implemented the policy. The majority of individuals who have been associated with Tennessee Technological University for 10 years or less knew little or nothing about the history or the workings of the policy.

Research Question Two

What are the strengths and liabilities of the performance funding policy according to current and former administrators and faculty members at Tennessee Technological University?

Interview Question IV posed the encompassing issue as to whether performance funding has had a meaningful impact at Tennessee Technological University. Sixteen interview participants responded directly to this question; of those, 13 (81 percent) indicated that performance funding has had a meaningful impact, two (13 percent) said it did not, and one (six percent) did not know. Those persons stating that performance funding has had an impact had a wide range of responses as to how the policy has done so (several participants mentioned more than one item):

Performance funding has forced Tennessee Technological University to stretch to set and meet goals	3
Performance funding helps to focus on academic outcomes	3
Performance funding helps to prepare for accreditation	3
Performance funding forces some departments to improve	2
Performance funding provides a (progress) report	2
Performance funding provides necessary budget relief	1
Performance funding helps relative to peer review of academic areas that do not have accreditation	1
Performance funding promotes self-study	1
Performance funding creates an awareness of the production of credit hours	1

Of the three individuals who stated that performance funding has not had a meaningful impact at Tennessee Technological University, their general responses include: 1) Tennessee Technological University would have been looking to improve (academically) anyway, 2) some disciplines without accreditation may not take performance funding seriously, and 3) academic departments do not benefit financially.

Generally, most interview participants had some understanding that performance funding involved working to review academic programs and to improve academic outcomes. Most faculty members and academic department chairpersons did not understand the relationship between meeting goals associated with performance funding and the money distributed to the campus; these individuals did not feel involved in the process since their respective academic disciplines did not directly benefit financially as a result of the policy.

Interview participants had a wide range of views on Interview Question V as to the strengths and benefits of performance funding at Tennessee Technological University. Participants provided numerous perceived strengths of the policy:

Performance funding's peer framework provides competition and an equitable comparison between institutions	5
Performance funding helps to prepare for accreditation reviews	5
Performance funding shifts emphasis from processes to outcomes	3
Performance funding forces institutions to gather data and use it	2
Performance funding addresses the question, "How are we doing?"	2
Performance funding provides financial rewards	2
Performance funding helps set goals	2
Performance funding helps provide year-to-year comparisons within Tennessee Technological University	2
Performance funding helps provide accountability	1
Performance funding provides money for faculty research grants	1

Most participants were positive about the performance funding policy's contribution to seeking improvement in academic outcomes at Tennessee Technological University. They also understood and appreciated how it has helped certain disciplines prepare for peer reviews and accreditation visits. A secondary strength of the policy that was demonstrated was the commitment to assess the institution against its own prior achievements.

In response to Interview Question VI, a substantial number of weaknesses and liabilities of performance funding were mentioned by study participants:

No connection exists between where money goes and academic areas; money goes to the general fund	9
It could be tempting to set easily attainable goals or to "teach to the test"	6
Peers are poorly chosen; performance funding does not account for uniqueness of mission	6
Money received from performance funding is not significant enough to matter, it is poorly funded	6
Performance funding is a poor way to address accountability	1
Performance funding borrows too much from the business world; students are not customers	1
Performance funding inhibits experimentation	1
Don't know	1

Significant complaints about the performance funding policy centered around comments about how funding for it was not very significant and that individual academic disciplines that score well relative to the performance indicators are not directly rewarded financially. Some respondents were also concerned that institutions could tinker with the policy to ensure that performance goals were met; that is, the institutions could create easily achievable goals that do not demonstrate any significant improvements.

As a wrap-up to Interview Questions IV, V, and VI, when asked Interview Question VII about whether performance funding has been either beneficial or harmful to Tennessee Technological University, 11 of 16 respondents (69 percent) indicated it has been beneficial, four (25 percent) said they did not know or had no opinion, and one (six percent) stated it has been both beneficial and harmful. No participants specifically indicated the policy was harmful to the institution. Most interview respondents were positive about one of performance funding's overriding goals—to enhance academic

outcomes. They also recognize that, for the most part, periodic revisions made to the policy's indicators have been for the better; that is, it is perceived that changes in the policy have, over time, increasingly adjusted to individual missions of institutions. In fact, no respondents expressed concerns about specific performance funding indicators utilized.

Research Question Three

What changes are recommended by current and former administrators and faculty members to improve or enhance outcomes relative to the performance funding policy at Tennessee Technological University?

Interview Question VIII specifically addressed how participants thought the performance funding policy can be improved. Several participants provided more than one answer. Responses were varied:

Involve faculty members and academic departments more directly	4
Goals have to be meaningful, not too easy to achieve	3
Reward specific academic units that perform well	3
Fully fund the traditional formula funding, then utilize performance funding	2
Performance funding should provide more money, or a larger percentage, of budget	2
Don't know	2
Five-year reviews of the performance funding policy need to continue	2
Institutions that are already excellent need to be recognized at the start of the performance funding process	1
Programs being evaluated need multiple measures	1

As has been indicated in other sections of this study, most interview participants believe that for performance funding to improve, better communication and involvement of the entire campus community and a greater financial commitment from the state to public support higher education are necessary. Most participants question the amount of time and financial resources necessary to partially make up for perceived shortfalls in traditional funding received from the state.

Interview Question IX asked participants to describe what they believe will be the future standing of performance funding at Tennessee Technological University. Again, participants often had more than one answer to the question. Summary views presented were as follows:

Performance funding will continue at its present level of importance	6
Performance funding will be a positive influence on campus because of the new administration's interest in quality-related issues at state and national levels	4
Performance funding may increase in importance	4
Performance funding will spark increases in accountability and "value-added" education	2
Performance funding will continue to need more grassroots involvement at the faculty level	2
Don't know	2
Performance funding will continue in a maintenance mode until funding is better	1

Because of President Bell's ongoing interest in quality-related issues, almost all interview participants stated in one form or another that the performance funding policy's profile will likely be enhanced or at least maintained at Tennessee Technological

University for the foreseeable future. Dr. Bell himself indicated his significant interest in continuously working to better assess the institution's progress in educating its students. Additionally, he is already quite knowledgeable about the policy, having worked with it as an academic dean for the past several years, and believes he understands the limitations of the policy.

Additional Information

Professional articles and papers given to the investigator by interview participants such as those co-authored by Associate Vice President Tolbert (Franklin & Tolbert, 1995a; Franklin & Tolbert, 1995b; Tolbert & Tolbert, 1994) and by retired Associate Dean of Engineering Ventrice (1989) consider potential improvement-related issues relative to assessment of student outcomes and to performance funding. In a paper presented in Finland, Franklin and Tolbert (1995a), for example, considered how assessment of student outcomes must address critical thinking skills—that is, the process needed to address and solve challenging problems. They acknowledge that assessing student critical thinking abilities is difficult for faculty. They also indicate that outcomes alone cannot be utilized to effectively evaluate student performance. The authors believe that students must learn varying means of resolution for problems and also jointly determine with faculty the processes by which students are making inferences and drawing conclusions.

Franklin and Tolbert (1995b), in their study of the School of Nursing at Tennessee Technological University, argue that any assessment of academic outcomes is useless without a plan to improve quality. They emphasize that it is important for improvement

plans to focus on the elimination of weaknesses and that evaluation of programs purporting to be excellent must extend beyond accreditation standards.

In studying seniors of the Department of Civil Engineering at Tennessee Technological University, Tolbert and Tolbert (1994) discussed three specific standards related to performance funding that directly utilized student outcomes for assessment: 1) general education outcomes, 2) major field achievement tests, and 3) student surveys. Used in conjunction with senior exit interviews, portfolios, senior projects, and seminars, Tolbert and Tolbert contended that adequate assessment data were available for evaluation and the improvement of instruction.

Dr. Ventrice's (1989) summary and conclusions section of her paper acknowledged that her findings regarding measuring the value added of educational experiences are somewhat limited in scope. In particular, she presented primarily short-term statistical information and argued that several years of such data would be needed to establish trends to determine if program changes affect any trends. Dr. Ventrice's findings did lead her to believe that investigation of college-wide and departmental norms relative to educational outcomes would be of greater benefit to institutions in determining value added rather than considering more global, university-wide norms that are usually considered in performance funding activities.

Summary of Findings

Varying levels of knowledge about performance funding and its employment at Tennessee Technological University were apparent. High-level academic administrators including central administrative staff, deans, and in a few other cases, assistant and associate deans, generally demonstrated at least a base level of knowledge about the

policy and its history at Tennessee Technological University. Administrators who had worked directly with the policy in depth at one time or another displayed confidence in responses to the principal investigator's questions. Historical documents relative to the performance funding policy support these statements.

Academic deans and department chairpersons have varying knowledge of performance funding relative to Tennessee Technological University. In particular, those individuals whose respective disciplines have national testing standards or accreditation are acutely aware of how criteria associated with performance funding can affect external and internal perceptions of their respective programs. Some department chairpersons, however, had almost no knowledge of the policy.

Faculty members, with little exception, generally demonstrated little knowledge relative to the topic or its impact at Tennessee Technological University. Even many interview participants involved with the performance funding policy at or near its inception, including faculty members, had somewhat hazy memories of the purpose and specific actions occurring related to the concept.

Significant gaps in communication about performance funding at Tennessee Technological University clearly exist. Based on information obtained through document review and interviews, the performance funding policy was given a significant amount of campus-wide attention when implemented in the 1970s on through the mid- to late 1980s. According to data, focus was on addressing improvement in student outcomes. Since then, it appears that many academically-related directives that may or may not address performance funding indicators filter down from upper-level administration to the faculty without much mention of how such actions relate to the policy. Perhaps because the

institution has performed so well over time relative to the performance funding policy, some senior administrators believe that communication activities such as developing goals and objectives are being adequately addressed whereas department chairpersons and faculty member believe they are being excluded from the process.

Department heads and faculty members are somewhat apathetic about the policy because they do not necessarily understand how it affects them in performing their jobs or how they can have an impact on the university's success. It does appear that deans in colleges where national accreditation is important to have done a more effective job of relaying information about the policy to faculty and department chairpersons than those who are in other academic areas, particularly liberal arts-type disciplines.

In particular, those persons whose academic disciplines do not have accreditation do not take as active an interest in the policy. This group is mixed in terms of being actively involved with performance funding on campus; for example, several persons were adamant about not being concerned with the policy because their respective areas did not directly benefit from a financial perspective. These participants were either aggressive and resentful toward state funding concerns or reticent and perhaps suspicious of how their responses might be perceived by others. Several of these individuals also discussed the performance funding policy as if it were completely separate from day-to-day academic activities at Tennessee Technological University, indicating to the investigator that the performance funding policy has not become an integral part of the entire campus culture.

The range of responses as to how performance funding has had an impact at Tennessee Technological University was quite broad and generally was dependent on

type of position participants held within the institution. Some participants focused on financial aspects of the policy, some considered academic issues including improvement in academic outcomes, some considered general goal-setting activities, and some believed that the policy has had little, if any, impact at all. Considering the extensive amount of response on the subject, one would be led to believe that performance funding has been, at various times over the years, a significant topic of discussion on campus.

Attitudes and opinions about the performance funding policy's impact at Tennessee Technological University are also varied, generally depending on the relationship of individual parties to carrying out performance funding activities at the institution. A handful of high-level administrators who work with the policy on a consistent basis tended to stress the importance of doing well relative to performance indicators to maximize resources to be used to help make up for deficits in traditional formula funding by the state. Some deans and other administrators made references to how performance funding is helpful in preparing for future academic accreditation visits—they discussed how, over time, the two processes have begun to coincide and demonstrate overlap in function. Most interview participants recognized that performance funding deserves merit as it is thought to help provide some direction for academic programs and departments perceived to be struggling.

Department chairpersons were generally critical of the performance funding policy, stating that it requires a great deal of information gathering by individual departments for no direct benefit to their respective academic disciplines. For the most part, faculty members having little or no ongoing involvement with the performance funding have little knowledge of the policy's purpose and believe that money generated

goes into, as one interview participant put it, "... a black hole—the general budget." As one might expect, there was a feeling among these individuals that performance funding was primarily of benefit to the general campus community rather than specific academic departments and/or programs.

Concerns about state-related funding for both the traditional funding formula and performance funding were pervasive among virtually all interview participants. Some participants, particularly faculty members and department chairpersons, indicated that it was not fair to judge academic excellence or improvements in academic outcomes relative to the performance funding policy when institutions are not even provided reasonable or even minimal resources by which to operate. High-level administrators generally stated that performance funding provides both internal and external means of accountability, hopefully strengthening the case for the State of Tennessee to increase future funding for public higher education institutions.

Almost all interview participants made mention of both strengths and benefits of the performance funding policy as well as weaknesses and liabilities. Clearly, Interview Questions V (regarding strengths and benefits of the policy) and VI (regarding weaknesses and liabilities of the policy) generated the most animated discussion among the majority of interview participants. Individual responses to these questions also tended to be significantly longer than for other queries. In particular, high-level administrators tended to stress the policy's impact on improving academic outcomes while department chairpersons and faculty members frequently focused on how they fail to witness any benefits from money received by the campus from performance funding.

As mentioned on several occasions, administrators, faculty and staff at Tennessee Technological University demonstrated a sense of competitiveness with other public higher education institutions in Tennessee, and especially with the University of Tennessee's Knoxville campus. It is obvious that several campus representatives were very much aware of how Tennessee Technological University compared on performance funding measures with the University of Tennessee, Knoxville. According to Bogue (1999b), Tennessee Technological University has accumulated more performance funding points than the University of Tennessee, Knoxville 11 times during the 1978-1998 period and tied twice. Especially interesting is that, despite many participants claiming to know little about performance funding, many individuals interviewed did know that Tennessee Technological University often scored higher on the performance indicators than many other four-year public higher institutions in Tennessee, including the Knoxville campus of the University of Tennessee, in any given year.

Some interview participants spoke of the University of Tennessee, Knoxville with chagrin because of its flagship status, perceiving that the lion's share of state higher educational resources always get directed there without question. Other individuals spoke of the University of Tennessee, Knoxville with a sort of reverence, alluding to the idea that Tennessee Technological University seeks to emulate its academic neighbor to the east.

Also apparent in the interview process was that many department chairpersons and faculty members had relatively little knowledge of the university's overall budget or financial dealings despite indications that they were interested in such concerns. The general perception by these participants was that upper-level administrators tend to their

own business and provides information about performance funding after the results are compiled, not while data collection is occurring. Department chairpersons and faculty members view performance funding as a single measure of some sort to account for work they would have already been undertaking to help improve student academic performance.

Virtually all study participants indicated that, while additional funding attained through performance funding was helpful for improving academic programs at Tennessee Technological University, the relatively small portion of the overall budget its supplements makes extensive investments of time and data collection only minimally worthwhile from a financial standpoint. Upper-level administrators repeatedly stressed time and again how, despite perceived improvements in overall academic quality, performance funding money simply helped make up for deficiencies in funding from the State of Tennessee through the traditional funding formula.

Interview participants clearly stated that their concerns about the performance funding policy could be improved through a handful of major actions. First, participants generally believed that the State of Tennessee does not provide enough money for performance funding to make the effort worthwhile from a financial perspective. Participants believed that the performance funding policy do not always take into account unique missions or characteristics of individual institutions. Participants also adamantly believed that a relatively small school such as Tennessee Technological University, given its strong history and high enrollment in high-cost academic disciplines such as engineering and the sciences, has often gotten short shrift through a reliance on traditional formula funding. Several participants, particularly deans and department

chairpersons, focused on the need for the state to fully fund the traditional formula before worrying about performance funding. A related issue involves a general belief by department chairpersons that performance funding will not really become a part of the campus culture until respective academic discipline areas are rewarded financially for performing well with regard to assessment of student outcomes.

Second, department chairpersons and faculty members indicated they knew little or nothing about either the purpose or the process involved with performance funding. Several participants stated they are not solicited to be actively involved with setting performance funding-related goals and only ever hear about the policy when Tennessee Technological University scores well on performance indicators in comparison to other public higher education institutions in Tennessee. Virtually all interview participants believed that faculty members need to be an integral part of the goal-setting process, but fairly extensive discrepancies exist between deans/high-level administrators and faculty members/ department chairpersons as to the current level of involvement of faculty.

Third, discrepancies also exist as to how to determine appropriate means by which to judge academic improvement and student outcomes. Most interview participants agreed that multiple methods of measuring student performance are important, but discrepancies exist as to who is responsible for determining the means by which such measurements should be made. Department chairpersons and faculty members generally believed that administrators had left them out of the information loop while high-level administrators believed numerous and multiple groups of campus constituencies were involved in carrying out tasks related to performance funding.

Department chairpersons and faculty members stressed an increasing need for consistent flows of information about the policy and their role in it.

Generally, interview participants believed that performance funding should at least maintain, if not increase, importance on Tennessee Technological University's campus. Much of this belief is due to the installation of Dr. Bell as President in July 2000. Many if not most participants were aware of Dr. Bell's work with quality concerns at the state and national levels and indicated that his interests would naturally coincide with improvements sought in performance funding.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Restatement of the Study's Purpose and Methods

This study's purpose was to describe and evaluate the influence of Tennessee's performance funding policy at Tennessee Technological University from 1979-1999. The principal investigator conducted a case study to evaluate the policy's effects at the university. Through interviews and document analysis, the principal investigator has sought to piece together an accurate historical perspective of the policy at the institution, to determine knowledge levels and attitudes relative to the policy, and to develop findings and recommendations for future action.

Conclusions

In addressing the research questions of the study, several major points were apparent:

- Relatively few documented academic-related policy changes have occurred at Tennessee Technological University as a direct result of performance funding, but the policy has had significant influence on issues such as peer review and accreditation of academic disciplines.
- Performance funding has been of benefit to Tennessee Technological University in that it has: 1) placed emphasis on outcomes and value-added components of a college education, 2) helped identify areas of weakness, and 3) provided additional money for the campus that may not have otherwise been available to the campus.

- Performance funding has been detrimental to Tennessee Technological University in that it has: 1) continued to illustrate a perceived communication block between central administration and academic disciplines, 2) created dissension between central administration and academic areas in that money received as a result of performance funding is used for what are perceived to be dissimilar purposes, and 3) become somewhat of an annual paperwork exercise for administrators rather than an ongoing process involving the entire campus community.
- The investigator believes that the performance funding policy at Tennessee Technological University can be improved and/or enhanced by: 1) taking actions to better inform faculty members and department chairpersons about the performance funding policy and creating opportunities for them to be more involved in addressing pertinent issues, 2) utilizing at least a portion of money received through performance funding for specific academic disciplines to demonstrate to how their input and effort can have an impact on their own department's bottom line, 3) the State of Tennessee providing full formula funding for public higher education and fully funding performance funding as well, and 4) continuing to study the performance funding policy's impact at the institution and working with appropriate internal and external constituents to ensure that efforts ultimately are focused on academic quality and improvement.

Tennessee Technological University has compared exceptionally well relative to other Tennessee higher education institutions with regard to performance funding scores

since the inception of the Performance Funding Project. The institution was clearly one of the statewide leaders in implementing the policy among the university community. Early involvement included a wide cross-section of university personnel including administrators, deans, department chairpersons, and faculty members.

Since the 1970s, many of those persons involved in performance funding have taken jobs elsewhere, retired, or died and few new people have been moved in to fill the void from a participation perspective. Mrs. Tolbert clearly is the driving force behind Tennessee Technological University's ongoing efforts to perform at high levels. Even so, the fact that the policy is only occasionally discussed at Dean's Council meetings reflects the thought that, over time, performance funding has gradually become more of a paperwork exercise for the campus as fewer and fewer individuals are involved on a regular basis.

A significant communication gap between high-level administrators and the individual academic colleges currently exists. Department chairpersons and faculty members do not feel involved in the communication process pertaining to the performance funding policy and, since state-related funding is considered only tenuous at best, are suspicious of participating actively in something they believe will be of no direct financial benefit to their respective academic areas.

Tennessee Technological University has continuously scored either the highest on performance indicators among all institutions in the State of Tennessee or at least near the top in any given year, almost without exception. It is feasible that since the institution continues to score well relative to the policy, it is not maximizing its efforts to improve specific to criteria and/or standards of the performance funding policy. In other words,

campus representatives may be thinking, "Don't fix it if it ain't broke." Not that the institution is flush with resources, but one can conceive that Tennessee Technological University might not wish to increase its resources with regard to time and effort in order to earn "just a little more money."

This perceived maintenance mode of operation relative to performance funding will likely change at Tennessee Technological University in the near future. The campus community's keen awareness of Dr. Bell's interest and involvement with quality-related concerns in academia as well as the business community should coincide closely with the goals of performance funding. It is clear that most of the individuals who participated in the study want to believe, and in many cases do believe, that Tennessee Technological University is arguably the best public university in the State of Tennessee, regardless of size. For campus administrators, strong performance funding showings relative to other institutions is one means to publicly demonstrate such excellence.

Recommendations

If high-level administrators at Tennessee Technological University want to promote performance funding so that it is more a part of the campus culture, they will need to expand active participation in the process more toward academic department chairpersons and faculty members. A greater connection between high-level administration and academic disciplines is needed whereby individuals from a diverse mix of the campus community meet on a relatively frequent, ongoing basis to plan strategies and monitor progress relative to performance funding activities. This mode of operation would be preferable to current reactions that, with some exceptions, appear to involve quantifying improvement-related actions already taking place after the fact in

order to address information needs of the Tennessee Higher Education Commission to submit requests to the legislature.

If improvement in student outcomes is of importance to the State of Tennessee, then the governor and the legislature must consider increasing the potential maximum benefit to be garnered by individual institutions in order to secure the attention and participation of more academic community members relative to performance funding. A potential maximum addition from performance funding of at least 10 percent of budget would likely greater generate interest among campus stakeholders, particularly individuals in academic departments. The 10 percent mark is suggested because an increase to that level was viewed by stakeholders at Tennessee Technological University as the minimum meaningful bonus level required to adequately recognize successful efforts involved with participating in the policy's purpose of improving educational outcomes; levels below 10 percent were considered "tokens."

Especially important for the President and other administrators allocating budget dollars within Tennessee Technological University will be that academic departments realize some direct financial benefit should respective areas perform at levels contributing to improvement in academic outcomes as related to performance funding criteria. Even relatively small disbursements made to departments for professional development and/or work-related travel might encourage some faculty and staff to: 1) become more knowledgeable about the policy, and 2) become more directly active in addressing criteria put forth in performance funding. Increased involvement of faculty members and academic department chairpersons may contribute to an improved execution of the policy at all levels.

Given the State of Tennessee's budget problems the past decade, it would behoove the Tennessee Higher Education Commission and the performance funding advisory committee to determine if performance funding is effective in rewarding institutions money for improved academic outcomes. Under the current system, state allocations for public higher education institutions are significantly lower than budget requests and such deficiencies are significantly more in total than the potential amount that could be earned through performance funding. While certainly helpful, monetary amounts earned by institutions through performance funding do not currently make significant differences in how institutions such as Tennessee Technological University operate since the reward, as perceived by campus stakeholders, does not even come close to making up for financial deficiencies in overall funding.

An ongoing, longitudinal study of performance funding activities at Tennessee Technological University and other public colleges and universities, initiated by individual campus administrations and the Tennessee Higher Education Commission, would provide a more complete picture of how the policy impacts academic decision making and improvement. Especially significant would be investigators' opportunities to interact with all individuals working directly with the policy at any given time rather than relying heavily on ad hoc availability of both records and people. It is likely that, at Tennessee Technological University, such a study would also encourage the development of a performance funding policy that better involves the greater campus community than now is the case. A formal evaluation of the policy's overall long-term effects could be instrumental in determining if the policy should be altered or continued within the state's current funding structure.

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APPENDICES

June 24, 2000

Dr. Angelo A. Volpe
President
Tennessee Technological University
204 Derryberry Hall
Cookeville, TN 38505

Dear Angelo:

Tennessee is one of five states participating in a national study of attitudes toward performance funding, a study funded by the Pew Charitable Trusts and coordinated by the Higher Education Program at the Institute of Government at SUNY-Albany. This national study is primarily a quantitative inquiry utilizing a questionnaire that you and members of your staff and faculty should have received in January.

A team of six doctoral students at the University of Tennessee working with me and members of their respective doctoral committees has developed an interest in exploring campus experience with the Tennessee Performance Funding Policy. They have proposed case studies of several different institutions, and Tennessee Technological University is one of the institutions we wish to have in the study.

These campus case studies would seek to understand campus experience with the policy. Have there been constructive impacts, as seen by campus stakeholders? Have there been impeding or less constructive impacts? Have there been serendipity or unanticipated benefits or liabilities? What suggestions might campus faculty and staff offer to revise and/or improve the policy?

Jeff Lorber, the doctoral student wishing to develop a case study at TTU, will contact you soon to set up a convenient time to introduce himself in person. Jeff is hoping to interview selected administrative and faculty officers and review documents pertinent to the institution's experience with performance funding. The anonymity of persons interviewed will be protected in the analysis and reporting of results.

TTU will be offered the opportunity to see the study in draft form and to make comments on the case study report. We will also extend an invitation for you and/or other campus participants to attend the public defense of the dissertation.

Angelo, thanks for your consideration of this request. Please call if you have questions.

Warm regards,

E. Grady Bogue

July **XX**, 2000

Salutation, First Name, Middle Initial, Last Name
Position Title
Tennessee Technological University
Address
Cookeville, TN 38505

Dear **Salutation & Last Name**:

Public higher education institutions in Tennessee have participated in the Performance Funding Project for 20 years. As a doctoral student in Educational Administration and Policy Studies at the University of Tennessee, I wish to learn about the impact performance funding has had in the state generally, and specifically, at Tennessee Technological University.

My dissertation research activity is being directed by Dr. E. Grady Bogue, Professor of Educational Administration and Policy Studies. Dr. Bogue has had extensive involvement with performance funding issues through a previous position with the Tennessee Higher Education Commission and through continuing research activity.

A significant portion of my research activity involves conducting interviews of academic and administrative officers associated with TTU. I am requesting you to agree to participate in an interview whereby your responses will not be identified with either you or your position. Your participation in this study will contribute toward an improved understanding of the impact performance funding has had at TTU. The outcomes of this research have potential to offer insight on improving TTU's ability to enhance its benefits related to performance funding.

Your participation in this study is voluntary and your formal consent is required. Should you agree to participate, please sign both consent forms enclosed and return one of the forms to me in the return envelope provided no later than August **XX**, 2000. After receiving your signed consent form, I will contact you to arrange a one-hour interview.

In advance, thank you for your consideration to participate in this study. Should you have questions, please contact me directly by calling (865) 974-7692 during regular business hours or by sending e-mail to jlorber@utk.edu.

Most sincerely,

Jeff Lorber

Enclosures

CONSENT FORM

Project Title: LONG-TERM EFFECTS OF PERFORMANCE FUNDING: A CASE STUDY OF 20 YEARS AT TENNESSEE TECHNOLOGICAL UNIVERSITY

The purpose of this research is to describe performance funding at Tennessee Technological University. Your participation in this research will involve an interview that will last approximately one hour.

This study will provide an overview of Tennessee Technological University's activities related to performance funding. Specifically, the researcher wishes to learn how performance funding in Tennessee has changed since its inception 20 years ago, the impact it has had on academic and budgetary decisions at Tennessee Tech, its liabilities and its potential for improvement in the future.

This study may not provide any personal benefits to you. Your participation is intended to benefit higher education generally by assisting in the gathering of necessary information. Participants involved with this study will not be exposed to risks that are greater than those of daily life.

As a participant, your identity and the office you represent will be kept confidential unless you give permission to be identified. Your agreement to participate in this study will be accomplished through signing and returning one of the enclosed consent forms. Confidentiality of your responses will be maintained by returning one of the consent forms in the envelope provided. You may retain the other consent form for your records.

Confidentiality of the material from the interview will be maintained by limiting access to the interview information to the researcher and a secretary. The secretary will transcribe interview tapes only after she has signed an agreement of confidentiality. The results from this study will be presented as part of my doctoral dissertation. The signed consent forms will be stored in a locked filing cabinet in my home.

The interview tapes and transcriptions will be stored in a locked cabinet while not being interpreted or transcribed. Materials from this research will be maintained for a period of five years after the conclusion of the study. After that time, these records will be destroyed.

Your participation in this study is voluntary. Choosing to participate will have no adverse effects. You may withdraw at any time during the study without penalty.

If you have questions about the research, either now or later, please contact Jeff Lorber, Engineering Development, University of Tennessee, 120 Perkins Hall, Knoxville, TN 37996-2012, or call (865) 974-7692 (work). You may also send electronic mail to jlorber@utk.edu. Should you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (865) 974-3466.

I have read and understood the explanation of this study and agree to participate.

Name (Please Print)	Date
Signature	Contact phone number with area code

I agree to have my name and office identified with my transcript.

Signature

- Please retain one copy of this consent form for your records.

CONFIDENTIALITY STATEMENT

Project Title:

LONG-TERM EFFECTS OF PERFORMANCE FUNDING:

A CASE STUDY OF 20 YEARS

AT TENNESSEE TECHNOLOGICAL UNIVERSITY

I, Sharyne Wishard, in agreement with Jeff Lorber, the Principal Investigator, understand that the transcriptions of the interviews that I will undertake are to be kept confidential. These transcriptions are only to be discussed with the researcher for purposes of clarification. I will keep all information seen through these transcriptions confidential including identities of participants and information given. I am being compensated for transcription services rendered.

I have read the above statement and agree with the conditions of my services.

_____ _____

Sharyne Wishard Date

- Please retain one copy of this form for your records.

Interview Protocol

Thank you for your agreement to visit with me today about performance funding in Tennessee and its relationship with Tennessee Technological University. If acceptable, I wish to tape this interview. May I have your permission to do so?

I. What factors led to Tennessee Technological University's participation in the Performance Funding Project?

   A. Were there any pressing academic issues at the university when performance funding began in 1979? If so, what were they and how did the university address them?

   B. What was the financial status of the university when performance funding began? Were there any particularly pressing financial concerns at the time? If so, what were they and how did the university address them?

II. Have substantial changes in curricula occurred at Tennessee Technological University since performance funding was implemented?

   A. If so, what have changes taken place? Were such changes related to the university's participation in performance funding? Have any academic programs been reduced or cut as a result of evaluative activities associated with performance funding?

   B. If not, would changes following the spirit of performance funding have made a difference in state allocations to the university?

III. How have state allocations to Tennessee Technological University changed since performance funding began in Tennessee?

IV. Has performance funding had a meaningful impact at Tennessee Technological University?

A. If so, how?

B. If not, please expound.

V. Please describe the strengths and benefits of performance funding relative to Tennessee Technological University.

VI. Please describe the weaknesses and liabilities of performance funding relative to Tennessee Technological University.

VII. Have changes in the evolution of the performance funding formula been beneficial or harmful to Tennessee Technological University? Please expound.

VIII. How can the performance funding policy be improved?

IX. How would you describe the future of performance funding at Tennessee Technological University?

X. Is there any additional information or are there additional comments you wish to provide? If so, please express those thoughts now.

XI. Are there other individuals you believe might be helpful in learning more about performance funding at Tennessee Technological University? If so, would you be willing to provide me with their names and level of involvement with performance funding?

Thank you for your valuable time and insights on this topic.

FORM B

IRB#_____

Date Received in Office of Research _____

THE UNIVERSITY OF TENNESSEE, KNOXVILLE

Application for Review of Research Involving Human Subjects

I. IDENTIFICATION OF PROJECT

A. Principal Investigator and Advisor:

Principal Investigator: Jeff Lorber
8016 Maple Run Lane
Knoxville, TN 37919
Home Phone: 692-0710
E-mail: jlorber@utk.edu
College of Engineering
Office of Development
The University of Tennessee
120 Perkins Hall
Knoxville, Tennessee
Work Phone: 974-7692

Faculty Advisor: Dr. E. Grady Bogue
Professor, Leadership Studies Unit
College of Education
The University of Tennessee
235 Claxton Addition
Work Phone: 974-6140
E-mail: bogue@utk.edu

B. Project Classification: Dissertation

C. Project Title: Long-term Effects of Performance Funding: A Case Study of 20 Years at Tennessee Technological University

D. Starting Date: Upon IRB approval

E. Estimated Completion Date: December 2000

F. External Funding: N/A

II. OBJECTIVES

The purpose of the case study is to describe the effects performance funding has had at Tennessee Technological University during the period 1979-1999. The study will focus on answering the following questions:

1. What, if any, substantial policy changes have been made at Tennessee Technological University as a result of the implementation of performance funding in Tennessee?
2. What are the perceived benefits and liabilities of performance funding at Tennessee Technological University?
3. What changes can be recommended to improve or enhance the performance funding policy at Tennessee Technological University?

The conceptual framework inherent is based on the idea that performance funding in Tennessee has continued to exist and improve as a result of cooperative activity between institutions of higher education and governmental entities. Mutual agreement on allocation of supplemental funding is also believed to have enhanced the standing of performance funding.

III. DESCRIPTION OF RESEARCH PARTICIPANTS

The population from which the participants will be chosen will include academic and policy officials in the State of Tennessee. In particular, the majority of participants for interviews will be current and former employees of Tennessee Technological University. Interviews will include representatives of the following areas:

A. Current and past presidents of Tennessee Technological University

B. Current and past chief academic officers of Tennessee Technological University

C. Current and past chief financial officers at Tennessee Technological University

D. Select current and former faculty members at Tennessee Technological University

E. Select current and former deans, department heads, and faculty members at Tennessee Technological University. A list will be obtained from the university through a "snowball" approach whereby early interviewees will recommend other individuals they believe would be knowledgeable on the subject of performance funding.

The principal investigator will mail a letter requesting participation by recipients accompanied by consent forms (see attached blank Consent Form). Participation in the study will include only those persons returning signed consent forms.

IV. METHODS AND PROCEDURES

Interviews will be conducted with academic and policy officials in the State of Tennessee. Interviews will be arranged by sending letters to potential participants requesting a meeting. Upon receiving signed consent forms returned through reply envelopes, the principal investigator will contact participants via telephone calls to set locations, dates and times for interviews. The interviews will be scheduled to accommodate the participants' calendars. Interviews will follow a standardized, open-ended format (see attached Interview Protocol). With participants' consent, the research

will utilize a tape recorder to document interviews. The principal investigator will additionally take hand-written notes during interviews.

Recorded tapes and notes will be transcribed and jointly analyzed. Recorded interview tapes will be identified by a code. Every participant will be assigned an individual code number that is known only to the researcher. Such coding will permit the researcher to organize tapes and prevent other individuals from assigning comments to any particular individual participating in the case study.

In an effort to maximize confidentiality, the only person other than the researcher to have access to recorded tapes will be a secretary hired to transcribe the tapes. Mrs. Sharyne Wishard will serve as secretary for these duties; she will sign a statement of confidentiality prior to transcription of the tapes (see attached blank Statement of Confidentiality).

Recorded tapes will be stored in the researcher's office, 120 Perkins Hall at the University of Tennessee, in a locked filing cabinet unless they are being transcribed. While tapes are being transcribed, they will be stored in a locked filing cabinet in the secretary's office located in 101 Perkins Hall on the campus of the University of Tennessee. Transcriptions will be stored on computer disc with one back-up copy that will also be stored in a locked cabinet in the principal investigator's office located in 120 Perkins Hall at the University of Tennessee.

A printed copy of all transcriptions will also be locked in a filing cabinet in 101 Perkins Hall at the University of Tennessee. All materials will remain in secure storage in the principal investigator's home for a period of five years after the study is complete. At the conclusion of this five-year period, the research materials will be destroyed.

V. RISKS AND BENEFITS

Participants in this study will experience a minimal amount of risk as they will be asked only to participate in an interview. This action will present no more risk than one would encounter in a daily work routine. Risks involved include confidentiality of responses and disclosure of the identities of participants, although general job titles such as executive staff, dean, and department chair may be revealed to consider possible differences in answers based on position and status. Confidentiality as to identities of participants will be upheld through the coding and security processes described earlier in this document.

The potential value of the increased knowledge to be gained about how performance funding affects Tennessee Technological University is an important step in learning how to address concerns related to this topic in the future. It is unlikely that individual participants in the study will benefit significantly from this research.

VI. OBTAINING INFORMED CONSENT

The researcher will obtain informed consent from participants prior to interviews by enclosing two copies of the Informed Consent Form with the letter requesting participation; one signed form will be sent to the researcher in a return envelope and the other will be retained by each participant for personal records. A copy of the form is attached. The signed informed consent sheets returned to the researcher will be kept in a locked filing cabinet at the researcher's home, 8016 Maple Run Lane, Knoxville, Tennessee, during the research activity and for five years following the completion of the study.

VII. QUALIFICATIONS OF PRINCIPAL INVESTIGATOR AND ADVISOR

The principal investigator has completed the majority of courses required for the Doctor of Education degree in Educational Administration and Policy Studies at the University of Tennessee. He is in the midst of writing for his comprehensive examination questions. He holds a Bachelor of Arts degree in Public Relations/ Communications with a minor in Accounting from the University of Northern Iowa and a Master of Science degree in College Student Personnel from Western Illinois University. The principal investigator has worked in several roles in university advancement for a more than 10 years at universities in the Midwest and at the University of Tennessee. He performs regularly in interview-type situations to cultivate, solicit, and provide stewardship relative to private gift support and possess expertise in interviewing techniques. He has completed a literature review and is knowledgeable about performance funding.

Dr. E. Grady Bogue is a Professor of Educational Administration and Policy Studies in the College of Education at the University of Tennessee and also Chancellor Emeritus of Louisiana State University, Shreveport. Dr. Bogue publishes extensively on performance and incentive funding, quality assurance, and leadership in higher education. In addition to many other roles, he was formerly the Associate Director of Academic Affairs for the Tennessee Higher Education and was instrumental in initiating the Tennessee's performance funding program.

VIII. FACILITIES AND EQUIPMENT

The facilities to be utilized for interviews will be each participant's office setting in order allow participants to remain at ease and so they may retain some control over the

physical environment for the interview. Should individual participants agree to it, a tape recorder will be used to document dialogue.

IX. RESPONSIBILITY OF PRINCIPAL INVESTIGATOR

By compliance with the policies established by the Institutional Review Board of the University of Tennessee, the principal investigator subscribes to principles stated in "The Belmont Report" and standards of professional ethics in all the research, development and related activities involving human participants under the auspices of The University of Tennessee. The principal investigator further agrees that:

A. Approval will be obtained from the Institutional Review Board prior to instituting any change in this research project.

B. Any unexpected risks that develop during the study will be reported to the Compliances Section immediately.

C. An annual Review and Progress Report (Form R) will be completed and submitted following requests by the Institutional Review Board.

D. Signed informed consent forms will be kept for five years following completion of the study at a location approved by the Institutional Review Board.

X. SIGNATURES

Principal Investigator: Jeff Lorber

Signature_____ Date_____

Faculty Advisor: Dr. E. Grady Bogue

Signature_____ Date_____

XI. DEPARTMENTAL REVIEW AND APPROVAL

The Institutional Review Board departmental review committee has reviewed and approved the application described above. The departmental review committee recommends that this application be reviewed as:

( ) Expedited Review-Category(ies):_____

OR

( ) Full Institutional Review Board review

Chair, Departmental Review Committee: Dr. Jeffery P. Aper

Signature_____

Department Head: Dr. Joy T. DeSensi

Signature_____

Protocol sent to Compliance Section for final approval on _____.

Approved: Compliance Section
Office of Research
404 Andy Holt Tower
The University of Tennessee
Knoxville, Tennessee

Signature_____ Date_____

VITA

Jeffrey Lorber was born in Muscatine, Iowa on June 30, 1964. He attended both public and private schools there until graduating from Muscatine High School in May 1982. He entered the University of Northern Iowa, Cedar Falls, Iowa during August 1982 where in May 1987 he received the Bachelor of Arts in Communications/Public Relations with a minor in Accounting. In August 1987, he entered the Master of Science program in College Student Personnel at Western Illinois University, Macomb, Illinois and received his degree in July 1990.

Lorber earned graduate credits in Higher Education Administration at Saint Louis University, in St. Louis, Missouri between August 1990 and May 1991 and in Leadership and Educational Policy Studies at Northern Illinois University, in DeKalb, Illinois between August 1996 and December 1997. Lorber entered the Doctor of Education program in Educational Administration and Policy Studies at the University of Tennessee, in Knoxville, Tennessee in June 1998. He was awarded the doctoral degree in May 2001.

Lorber has spent the majority of his professional career as a development officer, working to secure private gift support for several higher education institutions. He was previously employed in various capacities with the following universities:

- Washington University, St. Louis, Missouri (July 1989-June 1991)
- University of Northern Iowa, Cedar Falls, Iowa (June 1991-June 1994)
- Butler University, Indianapolis, Indiana (July 1994-July 1996)
- Northern Illinois University, DeKalb, Illinois (July 1996-January 1998)
- University of Tennessee, Knoxville, Tennessee (February 1998-January 2001)

Lorber has served as Vice Chancellor for University Advancement at Indiana University Northwest in Gary, Indiana since January 2001.