DEPARTMENT HEAD LEADERSHIP AND THE USE OF FACULTY CREDIT

HOURS AS A MEASURE OF FACULTY WORKLOAD

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HOURS AS A MEASURE OF FACULTY WORKLOAD

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ABSTRACT

The purpose of this study was to determine if faculty credit load assignments were an accurate measurement of faculty work loads. The study also identified management techniques of department heads at a private university and determined if these techniques are reflective of leadership used in a learning organization.

In this study faculty work logs were used to collect data on the number of hours full time faculty were working and faculty credit hour assignment cards were collected to determine the load assigned to the faculty member by the University. An interview for each department head was conducted to determine department headship strategies.

In order to determine if leadership techniques of department heads were consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002) interviews were conducted. Person-to-person interview questions (Merriam, 1998) were developed with consideration of learning organization characteristics.

While no significant correlations were discovered between the number of faculty credit hours on faculty credit assignment cards and hours logged by faculty members in the area of total time, time spent in teaching related activities, time spent in

administrative activities and time spent in advising activities a weak positive correlation was shown with total time logged and time in teaching related activities being the most notable.

The qualitative data provided insight on the leadership practices of department heads within the University. Department heads described circumstances in which flexibility and experimentation were practiced during the assignment of faculty work Yukl (2002). Moreover, department heads described leadership practices that allowed for bringing in outside knowledge (Yukl) and single and double loop learning Morgan (1997). While the number of descriptions of knowledge diffusion (Yukl) was limited, the overall leadership techniques of the University department heads would indicate the leadership styles are consistent with that of a learning organization.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Background

Over the last decade, several factors have placed faculty workloads in higher education under scrutiny. Improvements in technology and increases in the numbers of participants in higher education have lead to increased costs, which have largely been absorbed by the taxpayer. The increase in the diversity among students attending college has brought to the forefront the need for change in instructional methods. In addition, the transition to the technology era from the industrial era has altered both the content and the context of learning in higher education (Preskill & Torres, 1999). Technology improvements have increased the number of individuals seeking to further their education as well as providing increased opportunities for distance education (Meyer, 1998).

Instances of improper uses of funds and increases in the amount of taxes paid by citizens have contributed to a distrust of the leadership in higher education and a lowering of support for higher education (Meyer, 1998). With the taxpayer's primary concern being quality educational experiences that are developed from taxes paid, phrases like "the less a university professor teaches the more money they make" have contributed to the perception of inefficiency in higher education (Howard B. Altman, personal communication, February 24, 2006).

Additional focus on efficiency resulted from state governments moving away from the traditional process of self regulation and progressing toward a system that requires greater accountability in the use of government funding (Alexander, 1998). Economic stress and an increased number of students have lead stakeholders to question

efficiency and productivity in higher educational settings. Because 80 to 90 percent of an institution's budget goes to personnel, from the business perspective the logical transition would be the study of the workload of personnel to improve the use of funds (Miller, 1994; Meyer, 1998).

Questions regarding productivity and the use of funds have brought about numerous studies from both inside and outside the higher educational setting, with an emphasis on the efficient use of funds and not necessarily the improvement in the quality of education (Meyer, 1998). Studies conducted by institutions on productivity often place research as a measure of productivity and place little emphasis on teaching and service to students. Recent studies indicate, over the last ten years, that most faculty members work around fifty hours per week regardless of the type of institution, but more recently, the amount of time spent on research activities has accounted for a larger part of the fifty hours, even in settings where research is not a central part of the university mission (Milem, Berger, & Dey 2004; Meyer, 1998).

The least complex definition of workload considers the number of students served by the instructor and the number of classes taught. This type of data is reported out from universities more than any other measurement of faculty workload but, when determining faculty rewards and tenure, this definition is interwoven with scholarship and service to determine workload (Seaberg, 1998). Many studies reported that faculty work long hours but the time spent on teaching and related activities is not a large percentage of the total (Meyer, 1998). Governmental concern with faculty workload centers around time spent on instruction and minimizes the time faculty spends on research and service. In addition, longitudinal studies indicate the amount of time spent on teaching and related activities

has decreased (Meyer). "While the focus on faculty workload is useful, it has not yet resulted in any measurable gains in productivity which may be due to the general belief that teaching equates with lecturing and learning only takes place in the classroom" (Meyer, p. 2).

In 1999 the Higher Learning Commission (HLC) began a program in which an institution currently accredited with the HLC can maintain accreditation through participation in a program called the academic quality improvement program (The Higher Learning Commission, 2002). Currently, 160 institutions of higher education are participating in the program which uses a series of ongoing processes to demonstrate an institution is striving to improve performance with the ultimate goal of helping students learn. With overburdened faculty possibly not applying an adequate amount of time toward instruction, a thorough examination of faculty workload distribution can assist institutions in improving the instruction and learning occurring on campus.

While independence and autonomy have value within the higher educational setting, the value does not provide a defense against inefficiencies in the system (Alexander, 1998). In other words, independence from government control does not equate to unaccountability. Academic departments at liberal arts colleges and universities can be drastically different from one another in relation to how classes are taught and the emphasis placed on research. For example, music departments may have lower teacher to student ratios and much of the instruction that occurs in higher level courses is one-on-one (Diamond & Bronwyn, 2000). Other types of academic departments can make better use of larger classes or courses offered online (Groccia & Miller, 1998). When outlining the method of calculating faculty work loads, educational leaders should be careful that

"collaborative efforts are not undermined by specificity" (Howard B. Altman, personal communication, February 24, 2006). In other words, academic departments vary to such a degree in daily activities that a faculty workload policy can become too specific and therefore not accomplish fair and balanced work division among faculty members. Perhaps the most important part of a faculty workload policy is that it serves to develop an overall sense of fairness (H. B. Altman, personal communication, February 24, 2006). Most studies of faculty workload include no measure of the quality of instruction, but only include the number of hours spent teaching.

Recent increases in the overall number of students and variations in the types of programs that are offered have forced changes in how faculty spends time at work. In addition, technology has brought about change by the increasing number of online opportunities for students. Much of the changes in the measurement of faculty workload have been reactive rather than proactive. As noted by Birnbaum (2001), attempted change in higher education is brought about by the latest trends in the business community. Difficulties arise when programs from the world of business are adopted by higher educational institutions without taking into account the uniqueness of higher education. Concrete data for faculty workload is difficult to obtain and, while numbers can be determined to report to stakeholders, the value of this data is debatable. Higher education could benefit from a system of measuring faculty workload that involves a larger variety of variables and is not only based on time spent lecturing in the classroom.

Conceptual Underpinnings for the Study

Studies have shown several methods to classify and measure the daily activities of university faculty members. For the purpose of this study, all faculty work was classified

using the traditional three categories that encompass all faculty activities which are scholarship, instruction and service (Mancing, 1994). The following section begins with a description of the traditional methods of classifying faculty work. The next section is an analysis of recent changes in both the economic and technologic aspects of higher education with emphasis on how faculty work has changed and what has driven the scrutiny of faculty work. The section ends with a brief assessment of current data on faculty work to illustrate the need for further exploration of alternative methods of assessing faculty work loads in higher education.

Instruction

Instruction is usually the first item that comes to mind when faculty workload is considered, and instruction generally comprises from 30 to 70 percent of total workload. Research and doctoral universities tend to have faculty members that devote less time to instruction as compared to comprehensive and liberal arts institutions in which a greater portion of faculty work involves instruction (Milem, Berger, & Dey 2004; Carnegie Foundation, 1987). The method of determining faculty workloads by measuring faculty credit load hours has been in use for many years by a large number of institutions with little regard to the mission of the institution. While being accepted by many institutions as the method for assigning faculty workloads, little research has connected credit load hours to the daily activities of university faculty. Instruction is also easily connected to a university's mission whether the institution is a research based university or a liberal arts college (Diamond & Bronwyn, 2000). Most instructional time is determined through consideration of classes taught and self reporting of time involved in instruction while the

quality of instruction is generally not considered when measuring this category of faculty work (Meyer, 1998).

Scholarship

Faculty scholarship refers most often to research that is conducted by faculty with the intent to publish. Scholarship is more highly regarded by research institutions, but is considered a component of faculty work in other institutions where research is emphasized to a lesser extent. While research is a considerable part of faculty work, it is often not considered when faculty workload data is reported to stakeholders outside of higher education (Meyer, 1998). When school funding is considered, scholarship is often highly important to faculty because of promotion and tenure consideration while least important to lawmakers and outside constituencies evaluating faculty work. Yuker (1984) emphasized this point further by noting that faculty work is, and should be, much more than classroom teaching, which is a point that is lost when workload data is prepared for stakeholders outside of higher education.

Service

"Faculty service falls into two categories: institutional and professional. Institutional service includes administrative duties, committee work, and student advising, while professional service refers to work completed in support of one's academic discipline" (Mancing, 1994 p. 3). Faculty members usually spend between 15 and 25 percent of their time in service activities but the range of service activities allows for individual faculty members to vary a tremendous amount in specific service activities they perform. Institutional service activities are easily connected to the university's

mission while some professional service activities are more difficult to tie to university mission.

Economic and Technological Aspects

The increase in the number of students seeking higher education, coupled with restrictions in the amount of funds available, has forced institutions of higher education to examine programs that are offered to determine ways to become more efficient and productive (Meyer, 1998; Alexander, 1998). In regard to faculty work assignments, the individual workloads should be established at the department level with academic deans and department heads having perhaps the most important jobs on campus (H. B. Altman, personal communication, February 24, 2006). Deans and department heads have interest as educational leaders in determining if faculty members are being overworked or under utilized and state and federal governments desire higher education to justify the amount of funding they are receiving by illustrating the high productivity of faculty (Meyer).

The traditional structure of higher education is frequently challenged to adjust to changes that occur in technology and increased economic strain. Coinciding with new limitations in funds available from state and federal governments, as well as resources coming from the private sector, higher education has been forced to develop ways of measuring workloads and productivity and report these statistics to various constituents (Meyer, 1998). This competition for resources that occurs within the institution, both between departments and within departments, can bring about a tremendous amount of conflict as perceptions of inequality propagate (Bolman & Deal, 1997).

Differences in the division of work within a department along with dramatic changes in technology, including online courses, can add to the confusion of measuring

workload as well (Massey & Wilger, 1998). The use of new technology coupled with changes in instructional methods to make universities more effective require improved methods to access faculty work. In addition, as institutions adjust to serving an increasing number of students with wide varieties of learning styles, traditional methods of workload measurement fall short in determining if faculty are making efficient use of their time (Euben, 2003). In other words, traditional measurement methods are not applicable to the changes that are occurring in higher education.

Assessing Faculty Work

Many studies note that the majority of faculty members within a university work 50 or more hours per week (Braskamp & Ory, 1994; Glazer & Henry, 1994; Meyer, 1998) but, the wide variety of work that goes on, and the assortment of variables that measure workload, make any study of workload complex. Requests for numerical data on faculty workload have led to many studies that measure workload based on instructional activities like credit hours taught and the total number of courses and students participating in those courses. This data is a starting point for measuring faculty workload but the unique requirements placed on instructors in each discipline and different courses within each discipline call for more detailed studies in faculty workloads. In order to improve student learning in higher education, and for higher education to be able to adjust to changing demands, what faculty members are spending their time doing, and how to more effectively measure what they are doing, needs to be determined.

At liberal arts universities, and other non-researched based institutions, the majority of faculty time should be spent on teaching as indicated by institutional mission. The Carnegie Foundation (2005) identified more than 250 private not-for-profit

institutions that are primarily residential in nature, with enrollments of less than 2000 full time students. Many of these institutions have a large number of undergraduate programs and offer limited, or recently started, graduate programs. In addition, a large number of these institutions are located in the Midwest. Percentages of time spent by faculty in this category of educational institution should approximate between 65 and 75 percent instructional activities, 8 to 12 percent in research activities, and 12 to 18 percent in service activities (Mancing, 1994; Rees & Smith, 1991). The importance of tying the evaluation of faculty workload to the mission of the university should not be lost in determining if faculty members are spending enough time working, as well as working on desirable activities.

Determination of the productivity of faculty should also be based on institutional mission, and changes in that mission, rather than just considering the normal and traditionally used input and output measures of higher education. Moreover, if an institution of higher education is a learning organization, it will be more adaptable to changing environments and quicker to adjust to the changing requirements of stakeholders. Leaders in higher education could benefit from the recognition and development of mechanisms that promote organizational learning. Preskill and Torres (1999) offer that one of the best methods for organizations to learn is through reflection and dialogue on ways to improve for the future. Educational leaders should error on the side of over-communication because additional information processed by organizational members can result in less anxiety while organizational change is taking place (Whetton & Cameron, 1985). Open communication among organizational members is one piece of evidence that indicates a healthy organization.

Statement of the Problem

As available resources for higher education have become scarce, the stereotype of the university faculty member has been under attack. Long hours spent in the office conducting research or discussing pedagogy with other professors seems to contradict the efficient manner in which businesses are managed. While evidence has suggested that university faculty members generally work long hours (Meyer,1998; Seaburg, 1998) additional research is needed to determine what activities make up these long hours and how these activities have changed in the past few years.

Much information is available on how organizations create knowledge and adapt to changing environments (Morgan, 1997: Bolman & Deal, 1997; Bruffee,1999) but, research is needed to determine how smaller private universities are responding to economic and technologic changes and if the leaders of these institutions are implementing techniques characteristic of members of a learning organization. Moreover, the determination of faculty work distribution has been established primarily with the use of instructional measurements (credit hours and students served) in an effort to justify state and federal money allocated to the university without the consideration of the number of other types of activities in which university faculty participate. In other words, government agencies are concerned with base line numbers without genuine concern with what activities faculty members are actually engaged in that promote student learning.

Much of the research in faculty workload has been carried out in public institutions to determine if state and federal resources are being used effectively (Miller, 1994) rather than to determine how universities have adjusted to changing demands.

More research is needed to determine the ways in which economic and technological changes have effected faculty work and how higher educational institutions are responding as learning organizations. Moreover, the body of research on faculty workloads has been conducted in larger research based institutions rather than smaller private universities with instructional based missions. The more than 250 private, non-for-profit liberal arts institutions identified by the Carnegie Institute (2005) have been forced to adapt due to both changes in funding and changes in technology and course delivery. While recent studies suggest that faculty members are spending more time in all activities (Milem, Berger, & Dey, 2000), public research based universities accounted for a large portion of the data. More information is needed on the methods small private universities use to adapt faculty workloads according to economic and technologic changes.

Purpose of the Study

The purpose of this study was to determine if faculty credit load assignments were an accurate measurement of faculty work loads. "Faculty workload needs to be continuously studied because of the unique nature of each discipline as well as to provide evidence to determine heavy workloads are tied to negative student experience" (Hinrichsen et al. 2002, p.14). Credit hour assignments have long been used to measure faculty work in many types of institutions but little research has been conducted to determine the accuracy of this method. Some academic disciplines place emphasis on teaching and service while others are more concerned with research. This makes it difficult to determine a universal definition of faculty work (Diamond & Adams, 2002). An additional purpose of the study was to add to the knowledge base on the

determination or calculation of workloads, as well as identify management techniques of

department heads at a private university are reflective of leadership techniques used in a

learning organization.

Research Questions

The primary research questions were as follows:

> 1. Are faculty credit hours a valid measure of faculty work as indicated by the
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> relationship between faculty credit hours and total time engaged in work related
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> activities?
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> 2. Are faculty credit hours a valid measure of faculty teaching activities as
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> indicated by the relationship between faculty credit hour loads and the amount of
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> time spent in teaching related activities?
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> 3. Are faculty credit hours a valid measure of faculty administrative activities as
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> indicated by the relationship between faculty credit hour loads and the amount of
>
> time spent in administrative activities?
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> 4. Are faculty credit hours a valid measure of faculty advising activities as
>
> indicated by the relationship between faculty credit hour loads and the amount of
>
> time spent in advising activities?
>
> 5. Are the leadership strategies of department heads, in determining faculty
>
> workloads of the University, consistent with the strategies within a learning
>
> organization that encourage flexibility, experimentation, acquiring knowledge
>
> from sources outside the organization, and the diffusion of knowledge Yukl
>
> (2002)?

6. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997)?

Limitations, Assumptions, and Design Controls

One of the limitations of case study research involves the application of findings to other organizations. Case studies have value however when seeking to determine how one organization differs from another or when seeking to determine the internal operations of an organization (Thomas & Brubaker, 2000). "The case study is a useful approach that can be applied to diverse academic disciplines in varied contexts" (Thomas & Brubaker, p. 109). A case study approach is useful when complex problems can be addressed through an intense and rich analysis of a specific organization that can be used as a comparison for similar institutions (Merriam, 1998)

Much of the data used to measure faculty workload is reliant on the accuracy of data collected in surveys and work logs completed by institution administrators along with faculty members. While every effort was made to gather accurate data of full and part time faculty workloads, the study did not completely account for varying interpretations of faculty work assignments and individual reporting of this data. The study was a case study of a single Midwestern university and findings may or may not be applicable to other university settings.

Limitations and Assumptions

The limitations of this study involved the location, sample, and data collection methods. The study was conducted at a private, non-for-profit, Midwestern university

with an enrollment of about 1800 students. The University consists of ten academic departments and offers over 50 degree programs. Each department employs one faculty member as a department head and the University employs just less than 100 full time faculty members. The university has very little turnover in faculty with many professors having been with the university for more than 20 years. The University has been described as an excellent Christian place to work by the faculty in independent surveys. The University leadership above the department head level has also been very stable.

The Carnegie Foundation (2005) classifies more than 250 institutions in a similar manner and many of these institutions have locations in the Midwest. While the institution where the study was conducted was similar to many others, the generalizability of the findings is limited. The data collected in the study is limited by the accuracy of the University reporting of workload data as well as the accuracy of faculty in the reporting of their daily work activities. Faculty work logs were used as a method of determining the number of hours faculty members work but the study was somewhat limited because of individual differences in the perception of time as outlined by Lawrence (1994). The study was also limited by the number of faculty participating out of a possible 95 full time instructors at the University.

Design Controls

Descriptive research methods were used in the study to determine how faculty members spend their workday and participants were trained on the use of the faculty work log. The design of the faculty work log allowed for daily accounting of time spent in activities throughout the day. The self report or work log method has been used in several studies to gather data on how faculty members are spending time during the work

day (Glazer & Henry, 1994; Hinrichsen et al. 2000; Harter, Becker, & Watts, 2004). Participation in the study was assisted through encouragement from the Academic Dean, as well as recognition that faculty workload assignments are one of the top concerns of current faculty at the University. Concern about workload assignments was determined through participation in the Academic Quality Improvement Program outlined by the Higher Learning Commission. This area of concern was defined through faculty discussion, as well as, a ranking of the topics identified as areas of concern. In addition, faculty members were allowed to remain anonymous as data was reported and the percentage of participants by department was reported and rewarded by the institution.

A faculty workload log was designed to allow for ease and convenience in collecting and reporting faculty work. Many activities were described in a worksheet accompanying the log as activities were categorized into instruction, scholarship and service. Participants were encouraged to log any time spent in accomplishing the mission of the University and not only teaching related activities.

The University involved in the study is similar to many other Midwestern universities that have enrollments of less than 2000, are private not-for-profit, and offer a variety of degree programs which are primarily focused on the undergraduate level (Carnegie Foundation, 2005). Similar studies have considered data from comparably sized samples due to the fact that individual institutions are not excessively diverse from one another (Hinrichsen et al. 2002).

Definitions of Key Terms

Development of a more uniform interpretation of key terms was essential to the study. The following definitions were used to specify key terms used in the study:

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Faculty Workload

Faculty workload was the sum of the wide variety of activities, both assigned and assumed, conducted by faculty members. Workload consisted of three classifications of faculty activity that include: instruction, service, and scholarship (Harter et al. 2004). Workload was the total professional effort of a faculty member and was usually measured by class meeting hours per week (Euben, 2003).

Instructional Activities

Instructional time referred to time spent preparing for and designing classes, evaluating student work, meeting with students about class work, and any activity that is related to the teaching process at a university (Meyer, 1998).

Faculty Credit Hours

Faculty credit hours referred to the sum of the credit hours of classes taught including overload hours and release time. Credit hours were also assigned for other duties and are prorated accordingly with class credit hours serving as a base as defined by the handbook of the University involved in the study.

Faculty Service Activities

Faculty service included institutional service activities like advising, daily administrative work and committee service (Mancing, 1994). According to the American Association of University Professors, any professional responsibility that does not involve instruction or research would be considered a service activity (2000).

Faculty Scholarship

Faculty scholarship included research activities that add to the knowledge base that may or may not be published. Scholarship involved both the presentation or

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publication of research findings (Seaberg, 1998). Faculty scholarship was considered a process and keeping updated on current happenings in a discipline is not considered research.

Learning Organization

Preskill and Torres (1999) defined a learning organization as an organization with principles, mechanisms, and characteristics that allow for learning as a collective entity. Learning organizations have mechanisms in place that encourage and reward flexibility, experimentation, acquiring knowledge from sources outside the organization, and diffusion of knowledge (Yukl, 2002). These organizational structures allow the organization to adapt to changing environments. Learning organizations were organizations that had mechanisms in place that consistently monitor the environment and anticipate needed change. Learning organizations allowed opportunities for experimentation (Bolman & Deal, 2000), and had systems in place that allow for both single loop and double loop learning (Morgan, 1997).

Leadership Strategies

Leadership strategies referred to the techniques implemented by department heads to monitor current situations, make changes to improve conditions, and increase understanding of how the organization works (Bolman & Deal, 1997; Yukl, 2002). Leadership strategies included exercises that encourage organization members in doing what is best to determine and achieve organizational goals (Yukl).

Flexibility

Flexibility in a learning organization referred to the organization's acceptance of a variety of methods to accomplish a task. Flexibility allowed organizational members to

accomplish organizational tasks in a variety of ways and not always repeat methods implemented in the past (Yukl, 2002).

Experimentation

Experimentation in a learning organization referred to how an organization allowed members to try new ideas and test methods to increase organizational knowledge (Yukl, 2002).

Knowledge from Outside Sources

In a learning organization, knowledge from outside source referred to knowledge that was brought into the organization from individuals or groups outside the organization or knowledge that was acquired from the study of other organizations (Yukl, 2002).

Diffusion of Knowledge

Diffusion of knowledge in a learning organization referred to the sharing of relevant information among all members of an organization as new ideas and innovations are discovered (Yukl, 2002).

Single Loop Learning

Single loop learning referred to the ability to discover and correct mistakes in relation to current operating standards for an organization (Morgan, 1997).

Double Loop Learning

Double loop learning referred to an organization's ability to evaluate current operating norms to determine if a better system exists to carry out organizational tasks (Morgan, 1997).

Summary

Economic and technologic changes in society and higher education have brought about the call for the amount and type of work of university faculty work to be studied and reported. The majority of university faculty work long hours but the question of inequality in the distribution of workloads exists. Faculty members agree that workloads are of high importance especially; if faculty performance is being impeded by excessive workloads or that faculty work is not in alignment with the mission of the university. With the desire of faculty to participate in a study of workload at a high level, the acceptance and implementation of the faculty work log method was assisted.

The next chapter of the study is a review of the related literature followed by a description of the research design in chapter three, data analysis in chapter four, and summary, conclusions, and recommendations in chapter five.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The issue of faculty workload has been considered in higher education for at least the last thirty years (Meyer, 1998). Variables used to determine faculty workload thirty years ago are less effective in today's colleges and universities with the new emphasis placed on items such as total work time, individual productivity, individual student learning as well as the rapid changes in technology used in class presentation.

> Faculty roles are increasingly shaped by disciplinary differences and institutional missions and visions for higher education. Changes in student populations, in technology, and in the culture at large continue to influence faculty work. Faculty reward systems remain an obstacle to enhanced faculty productivity and satisfaction resulting in negative outcomes for learning. (Diamond & Adam, 2000 p.9)

The amount of emphasis placed on research by the institution over the years has influenced faculty workload as well as the apparent conflict between research and instructional activities in the university setting. Porter and Imbach (2000) noted the complex nature of faculty workload and the multiple measures required to accurately determine research, service, and instructional productivity.

In order to develop a broader perspective of the aspects of faculty workload, several categories of faculty responsibilities should be categorized and carefully considered along with the traditional method of using instructional credit hours to determine faculty loads. Various classifications of faculty activities encompass faculty

work and some of the categories and subcategories include: advising, practicum observation, classroom instruction, committee involvement, community service, research time, office hours, course preparation, student evaluation and professional development.

Traditionally, faculty workload studies classify all faculty activities into three groups consisting of: instruction, scholarship, and service (Glazer & Henry, 1994). In a study of faculty workloads at Kent State University, four categories that encompass the work that is carried out by university faculty were developed. These categories are scholarship, instruction, academic advising and administrative activities.

Several faculty workload studies assume the relationship between workload and productivity or workload and efficiency. More specifically, a large amount of time spent on a task does not necessarily correspond to increased efficiency and productivity nor does it indicate quality. Scarlett (2004) argued that credit hours earned by a student may not be the best measure of the student's education and, in a similar respect, credit hours taught may not be the best measure of a faculty member's productivity.

Another aspect of the study of faculty workload is the wide variance of workloads within individual departments on college campuses.

Defining faculty workload in academe raises many challenging issues because of the unique nature of academic work and the differing nature of disciplines. To give just a few examples, how should we credit time spent on team-taught courses, on course development, on supervising student independent studies and research or faculty supervision of practicum and student teaching? (Euben, 2003 p.2)

The motivation for the study of faculty workload deserves consideration as well. In many cases campus faculty workload studies have stemmed from state and federal governments desire to cut costs of higher education. As the budget crunch continues and changes in technology occur, emphasis will be placed on determining ways to make the university system more efficient. Public statements would indicate that all stakeholders wish to create better educational environments in relation to student outcomes but many faculty workload studies do not consider or include types of activities that would promote better outcomes (Milem et al, 2000).

Faculty workload studies can also be classified into studies that emphasize input measurements of faculty workload or output measurements of faculty workload in the university system. In other words, workload studies that are focused on inputs would consider how faculty spend their time in regard to the number of classes and students taught, while workload studies with an emphasis on outputs would consider the quality of instruction, or how students achieved in the class as well as the number of students who successfully completed the program.

Faculty Scholarship

The various activities that are classified as faculty scholarship are considered in the following section. The section begins with a discussion of the types of research activities, along with a discussion of the influence the type of institution has on the amount of faculty scholarship. The section concludes with other factors that influence faculty scholarship.

Research

The largest part of faculty work in the scholarship category would encompass research focused activities. Mancing (1994) divided research into three categories that include scientific research, humanistic scholarship, and artistic creativity. Mancing further stated that humanistic scholarship is most often pursued by humanities faculty and involves library research and writing rather than the observation centered research of the scientific community. Furthermore, research is a product rather than a process and does not involve reading to keep aware of current issues but consists of new contributions to the overall field of literature. Examples of research activities, according to Glazer and Henry (1994), would include both research and grant writing, paper presentation, grant administration and the publication of literature.

Some colleges and universities separate grant writing from other types of scholarship and, with increasing economic pressures, more faculty members are expected to secure departmental funds through written grants. Seaberg (1998) included grant or contract writing as a part of faculty scholarship while other studies separate grant writing into the service category of faculty work (Mancing,1994). Also included in the scholarship category were activities that involve the application of research findings to daily institutional activities in an effort to improve the efficiency of university procedures.

Research and Mission

The amount of research that university faculty members carry out can vary a large amount depending on the mission of the institution. Miller (1987) mentioned that scholarship at a research institution can mean something very different from scholarship

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at a two year community college or scholarship at a liberal arts college. Moreover, the amount of research carried out at research focused universities can differ from the amount of research at community colleges and comprehensive universities. Miller further stated "scholarship is a state of mind that encompasses the desire for content mastery, examination of all evidence, passion for accuracy, and a willingness to discard the old for the new" (p. 57).

Mingle (1992) reported that the instructional workload at research institutions has decreased over the past years due to the increased demand for grant writing and the large amount of funds that are available to support certain research projects. Counting the number of books and articles written is a simple way for department heads to evaluate productivity without including some of the more difficult measures such as instructional effectiveness or productivity in the advising of students (Scarlett, 2004). In some cases published research is interwoven with tenure and promotion to such a degree that faculty are encouraged to get out of the classroom and pursue research activities.

> If it is original work that is expected, but the institution fails to state candidly whether in practice scholarly publication will be regarded as the only valid evidence of such study, the effect may well be to push one part of the faculty into "publishing research" at the expense of a "teaching research" remainder. Neither faculty group will teach as well as before. (AAUP, 2000, p. 70)

In other words, when institutions emphasize only formal research that is intended for publication, informal research in instructional methods or in exploration of new developments in subject areas will suffer.

When department heads focus on the research portion of faculty work, the amount of time spent in supervision of instructional activities, as well as the amount of time required to respond to conflicts that result from such evaluations, decreases. In addition, faculty members begin to understand that research interests can be given full attention with little consideration for the quality of instruction provided (Scarlett, 2004). Scarlett further stated that research universities are prone to neglect undergraduate programs because of the recognition received from accomplishments in faculty research and graduate programs.

In institutions that are not research based, the emphasis on scholarship includes professional presentations along with types of publication that are not solely dependent on professional research. Research indicates the amount of research conducted at every type of institution from research universities to liberal arts colleges has increased over the last twenty years (Milem et al., 2000). It should also be noted that the amount of time spent in instructional activities has increased as well, with the exception of research based universities. In other words, the amount of research conducted by faculty at all types of higher educational institutions has increased, but only research based institutions report no increase in instructional time.

> Perhaps the most troubling of the findings from our study involves the amount of time that faculty across the system of higher education report that they spend advising and counseling students. Although we see a trend toward increased time doing research and even teaching to a large extent, there is evidence that time spent interacting with students in more informal settings is what may be suffering. (Milem et al., 2000, p. 463)

The amount of research undertaken can also differ according to the academic department of the faculty member within the institution. In other words, disciplines rooted in traditional scientific research have a different conception of the components of faculty work and research when compared to what is defined as research in disciplines that are artistic in form. More specifically, a liberal arts university's teacher education department will often conduct less research when compared to the same university's science and technology department.

Measuring Scholarship

Mancing (1994) suggested that scholarship is more difficult to measure than instruction, and that no convenient formula has been developed that is a quality measure of scholarship activities. Scarlett (2004) argued that instruction is more difficult to measure due to the fact that published materials can be counted. Furthermore, the mechanisms in place that select material worthy to be published serve as a quality evaluation of faculty research, while no mechanism is available to evaluate instruction in the same manner.

In separate studies involving similar institutions, faculty members at Kent State University were found to spend approximately 15 hours per week in scholarship activities while, in a study conducted at Bradley University, faculty members were found to spend 10.3 hours per week involved in scholarship activities (Glazer & Henry, 1994; Hinrich et al., 2002). Seaberg (1998) described the necessity to measure scholarship over an extended period of time because the nature of scholarship activities. Seaburg further stated that data collected on scholarship can be easily skewed because some faculty are heavily involved in scholarship while others are not involved at all.

Whether the institution is public or private can have an effect on the amount of research as well. Private institutions have, for a long time, secured funds through independent research projects. As traditional state and federal funding available for colleges and universities has dwindled, recently more public institutions have shifted focus to improve efforts that tap the large amount of funds available from private businesses (Meyer, 1998).

Faculty Instruction

The following section includes discussion of the variations in institutional and research definitions of faculty instruction. The section also provides information on factors that impact the amount of time faculty members spend in instructional activities. The section concludes with an overview of the different systems higher educational institutions use when assigning instructional time values to various class types.

Definitions of Instruction

"Instructional time refers to all time spent on activities directly related to teaching; it refers to time spent in class, preparing for class, preparing tests and assignments, grading tests and assignments, and other similar activities" (Yuker, 1984, p.29). Faculty instruction would encompass the courses taught as well as the number of students served (Glazer & Henry, 1994). Related areas included in the category are practicum and performance supervision, grading, class preparation and additional student contact outside normal classroom hours. Travel time between campuses and to practicum visits is also included in this category, although most faculty workload policies make no reference to travel time.

Because of the wide variety of activities in faculty instruction, many studies of instructional time break it down into component parts in order to determine a more accurate value (Yuker, 1984). In a study at Bradley University, faculty spent nearly forty hours per week in teaching related activities that included course related professional development (Hinrichsen et al. 2002). In a study at Kent State, faculty development was considered a part of faculty workload, but differentiated in a category separate from instructional time (Glazer & Henry, 1994). It should also be noted that individual instructional activities can be included in this category along with activities that encompass independent study courses, dissertation sponsorship, along with activities associated with committees that evaluate dissertations (Yuker). While the variety of activities that can be included as part of faculty instruction can seem abstract and difficult to measure, the number of classes and credit hours taught by faculty members has been researched the most due to pressure from funding sources, complaints from increases in tuition, and the increase in the number of individuals seeking higher education (Mingle, 1992; Scarlett, 2005).

Influences on Instruction

The reward system of a university can influence how instructors spend their time as well. In a study of Economics programs at several universities, Harter, Becker, and Watts (2004) found that economics instructors reported that they feel they spend more time on teaching activities than the relative emphasis they feel their departments assign them. In other words, faculty felt that the time they spend on instructional activities was more than the amount the university expected of them. The study offered that faculty may be seeking the immediate gratification of classroom instruction or, may not connect

spending more time on research with an increase in the amount of published material and an increase in the rewards associated with additional publication (Harter et al., 2004). In addition, the study concluded that the amount of time spent on teaching activities and research was proportional to the perceived emphasis placed on each activity by the university.

The greatest administrative hypocrisy of many colleges and universities involves attitudes toward teaching. In theory, many universities accord teaching a role comparable to that of research but in practice they give it secondary consideration at best when deciding on matters of promotion, tenure, and salary. Many colleges declare teaching to be their primary mission but give publication substantial weight in promotion, tenure, and salary deliberations. Faculty members at both types of institutions should demand that the institutional mission, faculty activities, and the reward system conform with one another; specifically, they should insist that merit in teaching be substantively rewarded to the extent that it figures in the institution's rhetoric" (Mancing, 1994, p.33).

The AAUP recommends maximum credit loads of 9 hours for graduate level classes and 12 hours for undergraduates, but Mancing (1994) suggested that these numbers may not apply to institutions where research is not a major part of the mission. Scarlett, (2004) argued that undergraduate programs are suffering from the lack of focus on the quality of instruction at both research and non-research based institutions with some universities offering undergraduate classes that are only taught by graduate assistants and not senior faculty members. With university faculty members spending

more time on both research and instruction, the quality of both comes into question (Hinrichsen et al. 2002).

Yuker (1984) described the uniform manner in which all classes are assigned workload values at many universities and noted the wide number of differences in course content and instructional format are not usually considered. Mancing (1994) mentioned the need for the difficulty of the courses taught to be acknowledged as a source of inequities in faculty workloads as well as the size of the class and whether or not the class is a new offering. Within some institutions, courses were categorized and assigned different workload values. In other words, a traditional lecture class is assigned one load credit per student contact hour while an English composition class is assigned 1.25 load credits to account for the increased amount of time spent on evaluation in the class (Harter et al., 2004). In a study of community colleges in California, five out of twelve institutions studied weighted composition courses differently than traditional lecture classes (Silvers, Attinasi, & McGregor, 1998).

The same study stated that half of the institutions in the study loaded laboratory classes at a rate of .75 load credits per hour of student contact. In classes larger than 50 students, the number of load hours per contact hour was adjusted incrementally in relation to the number of students. The adjustments culminated in load credits per contact hour, in classes larger than 156, being increased to 1.8. In contrast to the beliefs of many educators, researchers find that the effects of class size on instructional time to be minor and that it is difficult to determine the relationship, if any, between the instructional time for a particular class in relation to the size of the class (Yuker, 1984). Moreover, more

variables like one-on-one student contact and individual grading required, need to be considered when assigning higher workload values to larger classes.

Mancing (1994) admitted that all classes are not equally difficult to teach and workloads can be modified according to large classes, classes offered for the first time, and classes that involve a large amount of written work to be graded. Furthermore, the number of work-study students or teaching assistants influence the amount of time required by the instructor to effectively teach the class.

> The many differences among faculty workload formulas should make one skeptical about their utility. Formulas ignore differences among faculty members and among different courses at the same level. For all of these reasons workload formulas should be examined very critically before being considered for use. (Yuker, 1984, p.12)

Non-classroom Instruction

Some instructional time is not related to the classroom and a large amount of faculty instruction occurs during activities outside standard course loads. Formulas for calculating faculty workloads often lack the flexibility to encompass the variety of instructional time that is not spent in the classroom teaching.

> Not all teaching is classroom related. A department could modify faculty loads in order to recognize roles in the direction of theses, dissertations, and individual studies. A professor who is directing the readings of two students, serving on three thesis committees, and actively supervising a doctoral dissertation should receive some recognition for these teaching activities and adjustments in workload should be made accordingly. (Mancing, 1994, p.35)

These types of instruction do not show up on reports of workload that depend on data coming from institutional reports of courses taught and total students served in these classes. The freedom allowed in the university setting in determining how daily activities are conducted and the embracing of this freedom by university faculty, complicates the measurement of instructional preparation because preparation can occur at any time and at any place. The variety of preparations used depending on individual style and class requirements increase the difficulty in determining an accurate measurement of instructional time (Yuker, 1984).

Institutional and Professional Service

The most complex and difficult to accurately define aspect of faculty work load is service. "Service is an unwieldy, confused category encompassing almost any faculty work that falls outside research, scholarship and teaching" (Modern Language Association, 2000, p. 33). Service activities are usually divided into internal or institutional service activities and external or societal service (Modern Language Association). The following sections further define institution and professional service and conclude with previous studies of faculty workload and service.

Institutional Service

"Institutional service activities include administrative duties, committee work, and student advising" (Mancing, 1994, p.34). Institutional service also includes program design, budget development as well as fundraising activities. Many institutional service activities take place outside normal working hours and researchers may have a difficult time in determining what is leisure time with friends and what is fundraising work (Mancing). Institutional service activities that occur on campus are somewhat easier to

measure and include when researching faculty work because they can be related directly to institutional improvement (Yuker, 1984).

Professional Service

Professional service activities are more difficult to measure and include because these activities often involve the dedication of time outside the institution. "Much of the faculty work that meets the common sense definition of teaching is treated by default as professional service because it is not directed at what the institution would classify as students" (Modern Language Association, 2000 p. 45).

The terms practice and professional service are used to describe a broad category of faculty responsibilities that involve improvements to society such as public and university service, community outreach, and application of knowledge and practice (Braskamp & Ory, 1994). Traditionally these activities have been included in university faculty work but recently have been under scrutiny because of increased interest in workloads along with difficulty in measuring these types of activities. This category of faculty work is driven by society's problems and this specification can be used to separate practice and service from traditional research. "Faith in higher education's ability to do the right thing without external scrutiny or control has been replaced by calls for accountability and increased demands for information on revenues, expenditures, and resource management" (Groccia & Miller, 1998, p.1). While tradition suggests that higher education is very slow to change or respond to outside pressure, the economic pressure on colleges and universities may be a force strong enough to bring about change. Most of the general public is not familiar with higher education and, in turn, are willing to allow self governance. However, this is not the case when higher education begins to

heavily tap into the funds of taxpayers and education becomes less and less affordable.

When this occurs the pressure to change is magnified (Scarlett, 2004). "Good teaching requires a mixture of qualities and all types of intellectual activity by faculty should be valued because they benefit the community both inside and outside the university" (Hinrichsen et al. 2002, p.6).

Workload Studies and Service

The common perception of stakeholders outside higher education is teaching only takes place inside a classroom (Meyer, 1998). Therefore, many studies of faculty workload include no measure of service activities other than advising or service to students enrolled in traditional classes that happen to be meeting with instructors beyond normal class hours. The Modern Language Association (2000) argued that it is no coincidence that service falls behind instruction and scholarship when the three categories of faculty work are listed. In other words, the categories of faculty work are ranked by the order that they normally appear in print.

<div align="center">

Faculty Advising and Administrative Duties

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Because faculty advising and administrative duties make up the majority of faculty service activities the two are often considered separately in studies of faculty work (Meyer, 1998). The following sections consider in depth the service categories of faculty advising and administrative duties.

Faculty Advising

Depending on the time of the semester, academic advising can occupy a large or small amount of a faculty member's time. According to Miller, (1987) faculty advising is an important task for university faculty that receives very little attention in workload

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studies. This lack of attention can lead to a poor quality of faculty advising and encourage

faculty members to lessen the amount of advising included in workload determination.

"The problem of adequate student advising is a major problem at large public universities

where few, if any brownie points are given for advising" (Miller, 1987, p. 73). Recent

increases in the number of non-traditional students has increased the burden on faculty

advisors as well with many part-time students having full-time work schedules or other

demands on time for school.

Yuker (1984) suggested that the amount of time faculty members spend with

individual advisees is related to the value they place on advising students and the

importance of advising as part of the educational process. Regardless of the type of

institution, studies indicate that faculty members are spending more time on both

scholarship and instructional activities (Milem et al., 2000: Mingle, 1992). While the total

number of advisees serviced by faculty members may remain relatively the same, the

increase in the amount of time spent in other areas of faculty work may decrease the

quality of advising that occurs.

> The lack of variance that faculty report spending counseling and advising students
>
> coupled with the relatively meager amount of change in this measure over the last
>
> twenty years, indicate that this may be and institutionalized process…. Professors
>
> through their own experiences as college students have observed a common
>
> pattern of time allocated by other faculty to this aspect of academic role. (Milem
>
> et al., 2000 p. 463)

This is occurring at a time in higher education where demand for quality advising is high because of increases in the total number of advisees and increases in the number of non-traditional students.

The amount of time advising also depends on the number of actual office hours kept by the faculty member. In other words, many institutions have mandatory office hours but that does not mean that students have unlimited access to these hours due to the fact that many faculty members require appointments to be made before advising can take place. At some universities, advisors are also required to input the schedules of their advisees into the data system of the university. Higher education does not consistently measure or reward professors who excel at advising or other types of service activities (Scarlett, 2004). Moreover, no distinction is made between faculty members who readily accept and make attempts to go above and beyond the norm when advising and faculty members who reluctantly accept and are mediocre in their advising of students.

The number of advisees individual faculty members counsel can vary depending on the size of the department they work in as well as the other university activities assigned to them from the department. Moreover, individual faculty members may not provide an accurate representation of the entire department because student advisement is not always spread equally among the faculty. In his theory of faculty workload, Mancing (1994) noted that not all university faculty members have the talents needed to excel at all three aspects of faculty workload and the administration should be able to be flexible when determining individual workloads. In addition to the standard activities of advising, included in the category are career advising, writing letters of recommendation and other student contact not included in the instruction category (Glazer & Henry,

1994). Another part of faculty workload that has the potential to be under reported is the informal career and life advisement that occurs between students and faculty.

Administrative Duties

Glazer and Henry (1994) described administrative duties as committee membership, program evaluation, fundraising and accreditation activities. Program evaluation and accreditation activities have an extremely wide variance depending on the organizations that certify programs and the certification requirements of graduates of the program. Other definitions of administrative duties include additional categories.

> General administrative functions include institutional service activities that do not fit into other categories: performing the duties of department head, dean, vice president or other administrative officer, recruiting faculty or students, keeping records, preparing budgets, allocating space, maintaining inventories, pushing paper, and making nonpersonal telephone calls. (Yuker, 1984, p.58)

It should be noted that professional development activities that keep faculty updated within their discipline are often included in the category. Yuker noted that almost everything in the daily activities of a university professor involves professional development and that this category of faculty workload could account for much of the typical 55 hours of work per week reported by faculty. Yuker acknowledged the need for distinction between activities that are directly related to professional development and activities that are only loosely coupled to professional development, such as reading the newspaper or watching television news broadcasts.

Administrative duties have the potential to be difficult to document due to the large amount of informal work that occurs in fundraising and promotion of universities.

"A reduction of workload is in order when an institution wishes to draw heavily on the services of an individual in these ways or when, with its approval the individual is engaged in community or government service" (AAUP, 2000, p.71). Moreover, if a faculty member, because of a unique circumstance, is needed to devote a larger than normal amount of time to fundraising or other promotional duties, then special consideration needs to be made, as long as the activity falls in accordance with the mission of the institution.

<div align="center">Determining Faculty Productivity</div>

The recent emphasis placed on faculty workloads has promoted research in faculty productivity, in spite of the notion that faculty productivity is a taboo subject in higher education (Groccia & Miller, 1998). In addition, changes in higher education involving faculty promotion, the use of distance education, and the duties of part-time or adjunct faculty have complicated the determination of productivity. The following sections include influences on faculty productivity.

Faculty Productivity Measures

While many new studies have attempted to measure both workload and productivity, much of the productivity measures are driven by research measures rather than productivity in teaching roles (Kezar, 1999). Kezar further noted the need for additional research on productivity in the service and instruction categories of faculty workload. One method of measuring productivity involves the number of graduates a program produces, as well as the time it takes for students to obtain the degree (Meyer, 1998).

Policies related to time-to-degree and faculty-to-degree ratios are being used in several states such as Florida, North Carolina, and Indiana to force institutions to increase the number of students participating in higher education while creating a corresponding pressure to reduce the time it takes to complete degrees.

(Alexander, 1998, p.5)

Coinciding with the increase in the overall number of individuals seeking higher education, and the increase in the number of students at community colleges as well as institutions with a regional mission, the role of faculty in determining workloads has changed (Braskamp & Ory, 1994). With workloads increasing and more special programs tied to government funding, the decision making process in higher education has shifted from involving faculty in the decision making process to relying on university financial managers to determine who can be hired and ultimately the number of courses they should teach.

Tougher economic times have created the need for faculty to be more productive as well. Mancing (1994) offered, in regard to productivity, that faculty reporting fewer overall hours worked tend to devote a higher percentage of their time to teaching, but this does not equate to more hours involved in instruction, just a larger percentage of total time. In other words, faculty reporting a higher number of overall work hours are teaching about the same amount as faculty reporting less total time at work. Mancing further stated that productivity should not be considered a part of workload policy due to the fact that there is no way to take differences in individual faculty into account other than in the formal evaluation of faculty performance. Miller (1987) mentioned that productivity is a state of mind of all faculty members that have a focus toward

scholarship but does not offer a specific method of measuring the productivity of individual faculty members.

Many measures of faculty productivity involve inputs of the higher educational system such as classes taught, students served, and the number of full time faculty. Johnstone and Maloney (1998) noted that productivity can also be assessed using the outputs of the educational system which include the number of students successfully completing a course or a university program. Furthermore, improving the productivity of faculty does not involve increasing workloads or reducing staff, but involves making student learning more efficient by increasing student learning time and reducing the number of courses taken along with the amount of time for a student to obtain a degree. While the outputs of higher education can be as difficult to measure as the inputs of the system, Johnstone and Maloney offer year round calendars, better articulation between universities and community colleges, more college level high school learning, and better use of technology in all instruction including self paced learning as possible output measures. It should also be noted that the exploration of higher educational programs is a part of the learning process that takes place in university settings although it possibly leads to unnecessary courses being taking and extended time in degree programs.

Another method of improving faculty productivity is altering the traditional structure of classes offered. In an example offered by Walvoord and Pool (1998), the traditional method of lecture in composition classes was altered to allow more students in each section without an increase in faculty time and without sacrificing student discussion, writing time or overall learning. Video segments were implemented to replace the standard lecture sessions which allowed for less preparation time for the instructor

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allowing more time to be committed to discussion groups where student writing was evaluated. The overall time requirements of the class for the instructor were decreased while individual student time was increased. The inefficiency of the standard lecture, where students take notes and process them out of class as they read the textbook, was eliminated and benefits were reported for both the instructors and students (Walvoord & Pool). Moreover, the increase in the amount of discussion group and grading time was more than offset by the decrease in time of lecturing and lecture preparation.

Faculty Promotion, Tenure and Workload

The mechanisms in place at higher educational institutions to promote and tenure faculty members can also effect how faculty spend their time. These mechanisms can be very specific at two year colleges but highly vague at research based four year colleges. In general, faculty are pleased with reward systems that are described in detail but dissatisfied with more complex and less specific reward systems of highly research focused institutions (Miller, 1987). Recently, the concept of tenure has been scrutinized because tenured faculty members seem to be connected to inefficiency in higher education. "Some professors have questioned the value of tenure and newer faculty complain that tenure clogs career paths and older professors are making the best salaries while their productivity may be declining" (Van Patten, 2000, p. 52). On the other hand, universities use tenure to attract top faculty members and that over time, faculty members do retire and allow junior faculty to move up. Van Patten also reported that faculty members with the highest salaries at four year colleges teach much less than their lower salaried co-workers, which would seem to be in contrast with the mission of most four year institutions which is to balance quality research with quality instruction.

Faculty Workload and Distance Education

More recent examinations of faculty workload have included some aspect of measurement of online and distance education courses. The new instructional methods and curriculum changes brought about by the increase in distance education garnered comment from the AAUP as well:

Consideration should be given to the matter of increases in contact hours in the real or asynchronous time required to achieve interactive learning and student accessibility. The increased time in course preparation and the demands of interactive electronic communication with individual students call for a reduction in the maximum classroom hour assignment. (2000, p.71)

With the increase in the number of students that can be enrolled in a class and the reduction in the amount of on campus resources, the benefits of online or distance learning are clearly demonstrated. Van Patten (2000) noted that offering all or even portions of classes on-line allows for a better use of class space while enabling the enrollment of more students per class. The system used to assign workload values for online courses deserves close consideration because the decrease in the amount of time spent in class and preparing lectures for class may not evenly match with the increase in time responding to students via email and grading online work. The lack of a system to apply workload values to classes that implement full use of technology serve as a barrier to acceptance of the use of technology (Massey & Wilger, 1998). Moreover, the increase in students served per class may require a reduction in the overall course load of faculty teaching a large number of online classes. In some instances, faculty members design online courses and then pass the interaction with students and grading on to adjunct or

work study students having very little or any involvement with the class once it has been set up (Slaughter & Leslie, 2000).

Work Study, Part-time and Adjunct Work

The number of off campus programs and the increasing number of part-time or adjunct faculty deserves consideration when measuring faculty workload as well. "Given the incredible growth of off campus degree programs, the extensive use of part-time faculty throughout United States institutions, and the call by some accreditation associations for full-time faculty control of such programs, the need to redefine faculty workload exists" (Cook, 1995, p.3). Variations in the total number of work study students and the hours worked by each work can also influence faculty workloads because each faculty member is not assigned the same amount of work study help.

In some situations, tenured faculty are accounting for most of the salary paid within a department so money that is left that is available to train and retain part-time or adjunct faculty is very limited (Van Patten, 2000). The result is a large turnover in part-time faculty and few opportunities for part-time faculty to be promoted to full time status.

In a study of a large southwestern state university it was discovered that "adjunct or part-time faculty teach 69 percent of freshmen level classes while only 10 percent were being taught by faculty with the rank of a full professor" (Mingle, 1992, p.11). "Calculation of departmental faculty workload should take into account the contributions of part-time, adjunct faculty members, and faculty members that have external grants that account for a portion of their work time" (Mancing, 1994, p.35). Mancing also notes the need to include faculty members on sabbatical in departmental averages. The increasing

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number of overall students, along with the reliance on new technology to deliver education, drove a change in the way faculty members divide their time.

> Colleges and universities are meeting their instructional needs by increasing their reliance on part-time, adjunct, or non tenure track faculty members and on new technologies. The increased reliance on various types of non tenured track faculty has added to the workload of tenured and tenure track faculty, who must assume additional administrative and governance responsibilities. (AAUP, 2000, p.71)

While part–time faculty are assigned and compensated for instructional duties they often are not included in the other workload responsibilities of full time faculty. In other words, part-time faculty members are only involved in classroom instruction so the other faculty workload duties are passed on to full time faculty. "Activities that extend beyond classroom time should be defined recognized and part-time faculty that engage in these activities should be compensated" (AAUP, 2000, p. 72). Economic forces have also caused several for-profit educational organizations to enter the higher education sector. These institutions employ a high number of part-time instructors that do not have tenure and are not in control of the curriculum of the classes they teach. This raises the suspicion of many traditional faculty members at higher educational settings and leads to reluctance in the acceptance of part-time instruction (Mallon, 2001). Moreover, the increases in the hiring of part-time faculty have led some to believe that these increases are responsible for and result in a lower quality of education.

Institutional Factors and Workload

Institutions of higher education can be dramatically different from each other because of differing missions and differences in the academic disciplines existing

together on campus. Faculty work is also influenced by the culture of the institution as well as the learning mechanisms in place within the institution. The following sections consider the effects of institutional mission, organizational culture, organizational learning and interdisciplinary relationships on faculty work.

Institutional Mission and Workload

One common formula used by higher education to achieve balance in workload distribution is the 40-40-20 rule where 40 percent of time is spent in instruction 40 percent in research and 20 percent in service (Mancing, 1994). These percentages can vary, however, depending on the mission of the university. For example, community colleges or liberal arts colleges my have much higher percentages spent on instruction because the mission of the institution is not research. Mancing offered a percentage breakdown for these types of institutions as 75-10-15.

Variance can occur in workload distribution within individual departments in liberal arts colleges as well. Rees and Smith (1991) reported that faculty average 63% teaching, 21% research, and 16% service in reported workloads but note that some of the more prestigious universities claim a higher commitment to research. It should be noted that reducing instructional time is not strongly correlated to an increase in the amount of research done by faculty.

> The relationship between teaching time and research time is negligible, and universities should not reduce teaching loads in hope that it will result in more research. It would be more economical and practical to reduce teaching schedules of individual instructors who have demonstrated their inclination toward and ability in research. (Yuker, 1984, p. 46)

Universities need to determine the desire for research of individual faculty and allow a reduction of workload in specific cases and not apply blanket policies based on the mission of the institution (Howard B. Altman, personal communication, February 24, 2006). Moreover, an institution may be classified as a high quality institution because of the low workloads assigned to individual faculty but not be a highly productive university due to the lack of motivation to conduct research.

Organizational Culture and Workload

A number of studies of faculty workload were brought about by state and federal governments with a concern how appropriated funds to state universities were being used. The general feeling of government was the faculty in higher education had jobs that required little work and many faculty spend only a few hours at work or in the office each day (Lawerence, 1994). "Imbedded in the discourse of faculty workload are assumptions regarding the temporal aspects of faculty work, as well as the links between the use of time by faculty, their productivity and the effectiveness of colleges and universities" (Lawerence, p.3). In other words, any study of faculty workload will consider how individual perceptions of time-spent will vary and how perceptions of productivity are as different as the people reporting them. When viewing organizations through the symbolic frame, Bolman and Deal (1997) stated that the importance of an occurrence within an organization is determined by the perceptions of the event rather than the actual event. Moreover, if the perceptions of faculty are that they are working long hours and are being productive then this is actually the case regardless of any evidence suggesting otherwise.

Rafeli and Worline (2000) suggested that organizational symbols can influence perceptions of the culture of the organization and some of the symbols of higher

education can lead to perceptions of a lack of hard work or productivity. It should be noted that several studies classified high-quality institutions as those that are researched based and have relatively low teaching workloads (Yuker, 1984). This seems to be in conflict with the culture in the business world where this would be associated with a lack of productivity. A good example would be the image of the university professor that sits in his or her office overlooking the campus as they ponder on the meaning of life. "It is no small irony that the American Association of University Professors (AAUP) should consider time not spent teaching a measure of faculty and university quality" (Mancing, 1994, p.4).

Perceptions that faculty members have of one another, as well as perceptions of what occurs in departments outside of their own, can influence culture as well. If a large number of faculty members have the perception that inequalities exist, then the overall work performance of the institution can be negatively effected (Yuker, 1984). Yuker further stated that one of the primary uses of workload data is determination of equity of faculty members which lessens the amount of animosity towards other departments and faculty. Moreover, data on faculty can improve institutional culture by promotion of the concept of equity whether or not it is genuine. It should also be noted that students tend to feel that faculty work from between 50 and 70 hours per week, with graduate students assigning faculty larger weekly work values than non-graduate students (Yuker).

Student perceptions of how hard faculty members are working can also contribute to the collaborative reality of campus culture.

It is noteworthy that in the last five years, a number of universities have been taking stock of their cultures and seeking ways to more fully address and integrate

their multiple missions, which include not only research but teaching and

professional service roles. (Austin, 1996 p. 60)

Many universities have cultures that value hard work and faculty productivity but culture

is difficult to measure and express to outside stakeholders. This serves only to further the

gap between higher education and the perceived lack of productivity in environments

outside higher education.

It is also possible for a culture of conflict to develop between university

departments that tend to be more research driven and departments that tend to concentrate

on the discipline of instruction. When competition exists for a limited amount of

resources the potential for conflict is greater (Bolman & Deal, 1997). When this situation

occurs each department can view the other as being less productive for the university and

consuming more than their share of university funds.

Learning Organizations

Yukl (2002) described the need for highly competitive organizations to have

individuals all every level that focus on how the organization can acquire knowledge and

steadily improve.

In learning organizations, decisions are effected as much by the desire for

learning as by the desire to improve short term performance. There is a high level

of activity to develop and refine shared conceptual tools and mental models for

understanding how things work, how to adapt to the environment, and how to

achieve the organizations objectives. (Yukl, 2002)

Learning organizations have mechanisms in place that encourage and reward flexibility, experimentation, acquiring knowledge from sources outside the organization, and diffusion of knowledge (Yukl, 2002).

Working in collaborative or cooperative groups is one method that can be used in higher education to develop a higher level of understanding of complex topics. Millis (1990) exalted the value of cooperative learning because of the added individual accountability and the positive interdependence that occurs within cooperative groups. Cooperative learning, as in collaborative learning, places more of the responsibility of learning on the students and less on the instructor which, empowers learners to be monitors of other group members. Learning is also facilitated by social interactions in less formal settings where individuals speak from unique perspectives and promote a better understanding of different cultures (McCombs & Whisler, 1997).

The lack of specificity in workload formulas at some colleges and universities is necessary because it supports the collaboration that is needed between deans and department chairs as workloads are developed (Howard B. Altman, personal communication, February 24, 2006). Working in groups can create the creative chaos described by Nonaka and Takeuchi (1995) that promotes the knowledge spiral. Creative chaos and requisite variety are appropriate for faculty and staff groups that are assembled to solve problems within the university or to analyze the environment for possible changes that need to be made (Nonaka and Takeuchi). Educational leaders can achieve the maximum benefit from collaborative groups and teams from careful consideration of group characteristics that promote the creation of knowledge. This does not lessen the

importance of established university routines and norms that Hansen (2001) described as an effective mechanism for single-loop learning in organizations.

If one characteristic of effective leadership is commitment, then a trust needs to be developed that flows up and down the various roles within the organization. New ideas are often greeted with skepticism, which can make it difficult for leaders to implement them. Ogawa and Bossert (1995) stressed the importance of the development of culture as a part of organizational leadership. Organizations can benefit from recognition of their culture and increase the number of learning opportunities that take place by conducting activities that improve individual perceptions of culture. This does not mean a more positive opinion of the culture, but a better understanding of the culture which can improve the learning that takes place in the organization. Bolman and Deal (1997) referred to conflicts that result from individuals interpreting events from various perspectives. Organizations that fail to acknowledge the differences of individuals are inhibiting the development of a successful organizational culture.

Trust is a major component of healthy organizational culture and trust can be developed through recognizing individuals and the unique resources they can access for improving the organization. The visible characteristics perceived by an individual, along with the personal attitude of the individual, have a great effect on the perceived role a person plays in an organization (Ayman, 1993). Recognition that individual perception and attitude is a part of culture improves trust among organizational members which is an indicator of a healthy learning environment (Morgan, 1997).

Learning that takes place within higher education usually begins with a problem that needs to be solved that cannot be remedied by organizational memory (Hansen,

2001). Leithwood, Jantzi and Steinbach (1998) offered a similar definition but described the organizational learning process as including the activities brought about by a learning stimulus. Universities can benefit from the mechanisms that monitor the environment and allow individuals and groups to form opinions on how best to react. Leithwood, Jantzi, and Steinbach further stated that school leadership has the strongest influence on organizational learning. In these situations organizational learning takes place in order for the problem to be solved in a manner not previously implemented by the organization. This type of organizational learning is a result of double-loop learning and helps colleges and universities adjust to a changing environment (Hansen) such as the influx of international students or the increasing diversity in college classes. One of the outcomes of using groups in the classroom setting or using teams of university staff to brainstorm a problem is the creative chaos that occurs when groups are established with the requisite variety that promotes the knowledge spiral within the classroom or the university.

Teams are distinguished from work groups by shared leadership, individual and mutual accountability and collective work products (Katzenbach & Smith, 1993). In other words, assigning groups to complete a task without identifying group norms that promote a high performing team will not lead to the type of interaction and conversation needed for optimum learning. Lecioni (2002) also stated the importance of mutual accountability on teams and added that mutual trust within teams allows openness which is a foundation for quality teams. When training educational leaders, Bridges and Hallinger (1997) offered problem-based learning as a method of instruction as promotes a better connection between theory, research and practice. Furthermore, problem-based learning

allows prospective school administrators to apply knowledge in unique settings and offers a more realistic preview of what school leadership will be (Bridges & Hallinger).

Faculty Work Within the Disciplines

The uniqueness of each discipline of higher education can lead to some differences in the workload arrangements of faculty as well. Research has indicated, for the most part, that faculty rank loyalty to their disciplines higher than loyalty to their institution (Diamond & Adam, 2000). In other words, faculty may be seeking intrinsic rewards based on acceptance in their discipline rather than acceptance from the institute that employs them. The departments within a university share a value system based on the unique discipline to which they belong, which results in unique arrangements of faculty work loads.

The largest variety of faculty work within the various disciplines occurs within the scholarship category. Many academic disciplines have written statements regarding how their discipline defines scholarship (Diamond & Adam, 2000) and, while these statements are similar in what they address, the statements vary in how they address the definition of scholarship. Specifically, psychological and engineering statements involve research that takes place in laboratories while statements from the field of humanities make no mention of research conducted in a lab. Furthermore, the social responsibilities of a university professor in the medical field can be much different than the social responsibilities in the field of teacher education. The humanities often define research as quantitative or empirical in nature and scholarship as more theoretical. However, the scientific community normally does not distinguish between scholarship and research (Diamond & Adam, 2000).

While not as differentiated across the disciplines as scholarship, instruction can vary across the disciplines of higher education as well. Composition classes involve a different set of activities for the instructor when compared to a biology class. Many of these differences are brought about by the different accrediting organizations that regulate university programs. Most definitions of instruction, regardless of the discipline, include reference to the transfer of knowledge to students or assisting learners to become members of a knowledge community (Diamond & Adam, 2000; Bruffee, 1999). Instruction in higher education can be defined by a few universal principles but the unique aspects of each discipline allow for broad interpretations of the teaching that occurs within them.

Service activities may be the most consistent category of faculty work regardless of the academic department. "Through service activities, faculty members maintain and promote the function of departments, colleges, and disciplines" (Modern Language Association, 2000, p.49). Moreover, the main difference in the types of service activities performed in the various disciplines occurs because of the differences in the professional organizations, leadership structure, and the economic situation of the institution. Some differences in the amount of service work completed depend on the emphasis placed on service by the discipline as a whole. For example, social work programs in higher education, by the nature of the discipline, place a high amount of importance on service activities.

Summary

While university faculty are involved in activities that are categorized by instruction, scholarship, and research, the most common method of measuring faculty

workload involves some measure of faculty credit hours. In addition, many studies of faculty workload were brought about by state and federal governments which readily accept the concrete numbers of faculty credit hours, classes taught, and student contact hours as accurate measures of faculty workloads. The general stereotype that labels the university professor as teaching only a few classes and working a limited number of hours remains, although the number of hours worked by faculty members has risen steadily over the past decade.

Because of the complex nature of faculty work, faculty workload policies tend to be unspecific and department chairs and deans are the most suited university faculty members to assign faculty members workloads. The amount of credit hours taught by each faculty member will vary according to several factors including the mission of the university, the type of classes taught, the number of part time and adjunct faculty, and the unique skill set of the faculty member. Deans and department chairs use a variety of methods to assess the work that must be accomplished by the department and how the work is assigned according to the resources available to the department.

While change in higher education takes place at a slow rate, educational leaders have needed to make adjustments as social, economic, and technologic changes have occurred in higher education. Successful institutions have mechanisms in place that monitor the current educational climate and allow for adjustments to be considered to current programs.

Chapter three of the study outlines the overall design of the study and the methods used in the study for data collection and analysis. Data analysis and research findings are presented in chapter four with tables and chapter five includes conclusions,

recommendations and suggestions for further research. The instruments used in data

collection will be included in appendices.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

Research suggests that higher education, as a whole, has become more productive over the past two decades as emphasis has been placed on individual faculty productivity and efficiency (Milem, Berger, & Dey, 2000). As institutional funding has become more difficult to obtain, and the number of individuals seeking higher education has increased, department heads have needed to develop innovative methods to assign faculty work in their departments rather than relying on the traditional credit hour method. With the large variety of faculty activities and the differences in institutional mission, the standard of faculty work being described in terms of formal class meetings has drawn inspection (Euben, 2003). Because faculty activities range from traditional instruction and advising to setting up online courses and scheduling, the techniques that measure faculty workload effectively are complex in nature. This complexity is best addressed in higher education at the departmental level (Howard Altman, personal communication, 2006).

Chapter three outlines the research questions addressed in the study followed by a description of the population and sampling techniques used in the study. The next section of chapter three describes in detail both the quantitative and qualitative data collection methods implemented in the study. The chapter concludes with an explanation of the data analysis used in the study.

Within the context of this study, the following research questions were addressed:

1. Are faculty credit hours a valid measure of faculty work as indicated by the relationship between faculty credit hours and total time engaged in work related activities?

2. Are faculty credit hours a valid measure of faculty teaching activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in teaching related activities?

3. Are faculty credit hours a valid measure of faculty administrative activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in administrative service activities?

4. Are faculty credit hours a valid measure of faculty advising activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in advising service activities?

5. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002)?

6. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997)?

Population and Sample

The population for this study was composed of 95 faculty members of a private Midwestern liberal arts university. The 95 faculty members represented the complete number of full time faculty employed at the institution. The University has an enrollment of nearly 2000 students and offers 80 degree programs. The University has ten academic departments and each department has a single faculty member that serves as the department head. The number of full time faculty members in each department ranges from a low of 6 to a high of 12. The university has very little turnover in faculty with many professors having been with the university for more than 20 years. The University has been described as an excellent Christian place to work by the faculty in independent surveys. The University leadership above the department head level has also been very stable. The faculty members were chosen through stratified random sampling (Fraenkel & Wallen, 2003) to equally represent each academic department during each of the four two week periods faculty work logs were completed. Faculty members were selected in this manner in an effort to represent the ten academic departments, regardless of size, at various times throughout the semester. In other words, 25 percent of the faculty of each department participated in the study for each of the four two week segments. The chairs of each of the ten academic departments were also chosen for interviews in order to determine discipline specific methods of assigning faculty work.

Data Collection and Instrumentation

In this study faculty work logs were used to collect data on the number of hours full time faculty were working as well as faculty credit hour assignment cards to determine the load assigned to the faculty member by the University. An interview for

each department head was conducted to determine department headship strategies. The three instruments are described in detail in the next sections.

Faculty Work Log

The data in the study for the first four research questions was obtained through the use of faculty work logs (Appendix A) completed by individual faculty members for a two week period. The log was an electronic spreadsheet that automatically totaled hours for each type of faculty activity and supplied a letter code for each type of faculty work. The faculty work log accounted for each hour for the standard work day and allowed participants to log addition hours outside the standard work day. The types of faculty activity were summarized on the spreadsheet and assigned letter codes (Appendix B), these activities were described in greater detail in another attachment to avoid confusion in how to categorize faculty activities. The log separated faculty work into 15 categories in an effort to better isolate the components of scholarship, instruction, and service. Individual categories of administrative and academic activities were considered for the study as well as the total time reported. Faculty members were allowed to leave blanks in the log for non-work related activities. The work logs were electronically delivered to faculty members and each faculty member received a code to ensure that any data reported would remain anonymous. Faculty surveys have often been used in research as a method of gathering data on how faculty members allocate time for daily activities (Milem et al., 2000; Meyer, 1998; Harter et al., 2004).

Faculty Credit Hour Assignment Cards

Faculty members were required to fill out faculty credit hour assignment cards. These cards describe the classes taught and the activities of the faculty member to which

credit hours are assigned. These cards were approved by each academic department head as well as the academic dean. A credit hour load of 12 is considered full but loads can range from 12 to 15 before overloads are reached.

Interview Protocol

The data for research questions 5 and 6 was obtained using person-to-person interview techniques (Merriam, 1998). Interviews were conducted in order to gain additional information on the management techniques of department heads in assigning faculty workloads. According to H. B. Altman (personal communication, 2006), the differences among departments within the university promote the concept that department heads were best suited to determine faculty work loads because of an understanding of the uniqueness of the discipline and the ability to adapt workloads according to individual skills of department members. Department heads at the University were asked questions as to the methods that employ to efficiently assign faculty work within the department and how individual skills and equality of assignments were combined to improve both efficiency and quality (Appendix C). Department heads were asked questions regarding the used of management techniques congruent with that of a learning organization as outlined by Yukl (2002) and Morgan (1997).

<div align="center">*Data Analysis*</div>

The data collected from the faculty work log and credit hour assignment cards was analyzed using the statistical package for the Social Sciences (SPSS) version 13.0. Tests were performed to determine if relationships exist. In addition, qualitative research methods (Merriam, 1998) were employed to determine the leadership techniques of

department heads and to determine if these techniques were consistent with learning

organizations as outlined by Yukl (2002) and Morgan (1997).

Reasearch Question 1

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if

the number of assigned faculty credit hours was a predictor of total time logged by

faculty in total work activities. An alpha level of .05 was used to determine significance.

Research Question 2

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to

determine if the number of assigned faculty credit hours was a predictor of time logged

by faculty in teaching related activities. An alpha level of .05 was used to determine

significance.

Research Question 3

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to

determine if the number of assigned faculty credit hours was a predictor of time logged

by faculty in administrative activities. An alpha level of .05 was used to determine

significance.

Research Question 4

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to

determine if the number of assigned faculty credit hours was a predictor of time logged

by faculty in advising activities. An alpha level of .05 was used to determine significance.

Research Question 5

In order to determine if leadership techniques of department heads were

consistent with the strategies within a learning organization that encourage flexibility,

experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002) interviews were conducted. Person-to-person interview questions (Merriam, 1998) were developed with consideration of learning organization characteristics. Responses to these questions were transcribed and coded (Merriam) to determine if responses indicated a learning organization as defined by Yukl.

Research Question 6

In order to determine if leadership techniques of department heads were consistent with the strategies within a learning organization consistent with a learning organization that allow for both single and double loop learning as defined by Morgan (1997) person-to-person interviews were conducted (Merriam, 1998). Interview questions were developed with consideration of learning organization characteristics. Responses to these questions were transcribed and coded (Merriam) to determine if responses indicated a learning organization as defined by Morgan.

Summary

The amount of time faculty report spending in work related activities has increased over the past decade but the primary method for assigning faculty work has remained the same (Meyer, 1998). Most studies of faculty member work loads involve some type of self report survey (Seaburg, 1998). This survey method has been used to determine how many hour faculty are working but has not been used to determine if faculty credit hours are a good indicator of the amount of time spent in faculty work activities. The institution involved in the research is similar to other liberal arts colleges as described by the Carnegie Foundation (2005).

The data collected in the study was analyzed using SPSS to determine if relationships exist between the credit hours assigned and the amount of work hours reported by faculty members. In addition, the interviews of department heads were used to determine other mechanisms implemented to determine and assign faculty work loads and if these mechanisms are consistent with a learning organization as described by Yukl (2002) and Morgan (1997).

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to determine if faculty credit load assignments are an accurate measurement of faculty work loads. "Faculty workload needs to be continuously studied because of the unique nature of each discipline as well as to provide evidence to determine heavy workloads are tied to negative student experience" (Hinrichsen et al. 2002, p.14). Credit hour assignments have long been used to measure faculty work in many types of institutions but little research has been conducted to determine the accuracy of this method. Some academic disciplines place emphasis on teaching and service while others are more concerned with research. This makes it difficult to determine a universal definition of faculty work (Diamond & Adams, 2002). An additional purpose of the study was to add to the knowledge base on the determination or calculation of workloads, as well as identify management techniques of department heads at a private University and to determine if these are reflective of leadership techniques used in a learning organization.

The relationship between faculty credit hour assignments and the amount of hours logged by faculty members using a time log was examined in this study. In addition, department heads were also interviewed to determine their leadership strategies and to then determine if these strategies were consistent with that of a learning organization as defined by Yukl (2002) and Morgan (1997).

The primary research questions were as follows:

1. Are faculty credit hours a valid measure of faculty work as indicated by the relationship between faculty credit hours and total time engaged in work related activities?

2. Are faculty credit hours a valid measure of faculty teaching activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in teaching related activities?

3. Are faculty credit hours a valid measure of faculty administrative activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in administrative activities?

4. Are faculty credit hours a valid measure of faculty advising activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in advising activities?

5. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002)?

6. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997)?

Population and Sample

The population for this study was composed of 95 faculty members of a private Midwestern liberal arts university. The 95 faculty members represented the complete number of full time faculty employed at the institution. The number of full time faculty members in each department ranges from a low of 6 to a high of 12. Forty-three faculty members participated in completing faculty work logs for the assigned two week period. The University has ten academic departments and each department has a single faculty member that serves as the department head. The chairs of each of the ten academic departments were also chosen for interviews in order to determine discipline specific leadership techniques in assigning faculty work. Of the ten academic departments eight of the department heads participated in the interview process.

Data Collection and Instrumentation

The study used faculty work logs to collect data on the number of hours full time faculty were working as well as faculty credit hour assignment cards to determine the load assigned to the faculty member by the University. An interview for each department head was conducted to determine department headship strategies.

Faculty Work Log

The data in the study for the first four research questions was obtained through the use of faculty work logs (Appendix A) completed by individual faculty members for a two week period. The log was an electronic spreadsheet that automatically totaled hours for each type of faculty activity and supplied a letter code for each type of faculty work. The faculty work log accounted for each hour for the standard work day and allowed participants to log addition hours outside the standard work day. The types of faculty

activity were summarized on the spreadsheet and assigned letter codes (Appendix B),

these activities were describe in greater detail in another attachment to avoid confusion in

how to categorize faculty activities. The work logs were electronically delivered to

faculty members and each faculty member received a code to ensure that any data

reported would remain anonymous. Of the 43 faculty members who participated in filling

out work logs for the two week period, 35 were returned electronically using email and

eight were delivered via campus mail. The highest weekly total reported was 76 hours

while the lowest was 29. Five faculty members returned only one week of the work log

and were not included in the study.

Faculty Credit Hour Assignment Cards

Faculty members are required to fill out faculty credit hour assignment cards each

semester. These cards described the classes taught and the activities of the faculty

member to which credit hours are assigned. These cards are approved by each academic

department head as well as the academic dean. A credit hour load of 12 is considered full

but loads can range from 12 to 15 before overloads are reached. The assignment cards

were provided by the academic dean. The lowest credit assignment was 6 hours and the

highest credit assignment was 24 hours.

Interview Protocol

The data for research questions 5 and 6 was obtained using person-to-person

interview techniques (Merriam, 1998). Interviews were conducted in order to gain

additional information on the management techniques of department heads in assigning

faculty workloads. According to H. B. Altman (personal communication, 2006), the

differences among departments within the University promote the concept that

department heads are best suited to determine faculty work loads because of an understanding of the uniqueness of the discipline and the ability to adapt workloads according to individual skills of department members. Department heads at the University were asked questions as to the methods that employ to efficiently assign faculty work within the department and how individual skills and equality of assignments were combined to improve both efficiency and quality (Appendix C). Department heads were asked questions regarding the used of management techniques congruent with that of a learning organization as outlined by Preskill and Torres (1999).

Eight of the ten department heads were interviewed. The interviews took place at various times throughout the day and each interview was conducted in the office of the department head. The department heads were willing to be recorded and the interviews lasted slightly less than 30 minutes. Each department head was provided with a copy of the interview questions before the interview and each had gone over the questions to some extent.

Data Analysis

The data collected from the faculty work log and credit hour assignment cards was analyzed using the statistical package for the Social Sciences (SPSS) version 13.0. Tests were performed to determine if relationships exist. In addition, qualitative research methods (Merriam, 1998) were employed to determine the leadership techniques of department heads and to determine if these techniques were consistent with learning organizations as outlined by Yukl (2002) and Morgan (1997).

Research question 1. Are faculty credit hours a valid measure of faculty work as indicated by the relationship between faculty credit hours and total time engaged in work related activities?

To address the research question above a Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of total time logged by faculty in total work activities. An alpha level of .05 was used to determine significance.

Table 1

Correlation of Faculty Credit Hours and Total Hours Logged by Faculty (N=43)

Variable	Mean	Std. Deviation	(*r*)	Sig. (2-tailed)
Credit Hours	12.76	2.67		
Total Time	47.44	12.03		
			.246	.112

A Pearson *r* value of .246 indicated a weak direct relationship between the number of faculty credit hours (*M* = 12.76, *SD* = 2.67) and the total time engaged in work related activities (*M* = 47.44, *SD* = 12.03). While the *r* value indicated a direct relationship the relationship was not deemed significant. Furthermore, faculty credit hours accounted for six percent of the variance in total time logged by faculty (R Squared = .06).

Research question 2. Are faculty credit hours a valid measure of faculty teaching activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in teaching related activities?

To address the research question above a Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of time logged by faculty in teaching related activities. An alpha level of .05 was used to determine significance.

Table 2

Correlation of Faculty Credit Hours and Time in Teaching Related Activities (N=43)

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Variable	Mean	Std. Deviation	(*r*)	Sig. (2-tailed)
Credit Hours	12.76	2.67		
Teaching Time	25.52	8.82		
			.234	.131

_____

A Pearson *r* value of .234 indicated a weak direct relationship between the number of faculty credit hours (*M* = 12.76, *SD* = 2.67) and the total time involved academic activities (*M* = 25.52, *SD* = 8.82). While the *r* value indicated a direct relationship the relationship was not deemed significant. Furthermore, faculty credit hours accounted for 5.5 percent of the variance in total time logged by faculty (R Squared = .055).

Research question 3. Are faculty credit hours a valid measure of faculty administrative activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in administrative activities?

To address the research question above a Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours

was a predictor of time logged by faculty in administrative activities. An alpha level of .05 was used to determine significance.

Table 3

Correlation of Faculty Credit Hours and Time in Administrative Activities (N=43)

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Variable	Mean	Std. Deviation	(*r*)	Sig. (2-tailed)
Credit Hours	12.76	2.67		
Ad. Time	6.26	7.15		
			.173	.266

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A Pearson *r* value of .173 indicated a weak direct relationship between the number of faculty credit hours (M = 12.76, SD = 2.67) and the total time in administrative activities (M = 6.26, SD = 7.15). While the *r* value indicated a direct relationship the relationship was not deemed significant. Furthermore, faculty credit hours accounted for 3 percent of the variance in total time logged by faculty (R Squared = .03).

Research question4. Are faculty credit hours a valid measure of faculty advising activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in advising activities?

To address the research question above a Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of time logged by faculty in advising activities. An alpha level of .05 was used to determine significance.

Table 4

Correlation of Faculty Credit Hours and Time in Advising Activities (N=43)

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Variable	Mean	Std. Deviation	(*r*)	Sig. (2-tailed)
Credit Hours	12.76	2.67		
Advising Time	1.98	3.01		
			.082	.599

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A Pearson *r* value of .082 indicated no relationship between the number of faculty credit hours (*M* = 12.76, *SD* = 2.67) and the total time in advising activities (*M* = 1.98, *SD* = 3.01).

Research Question 5. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002)?

In order to determine if leadership techniques of department heads were consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002) interviews were conducted. Person-to-person interview questions (Merriam, 1998) were developed with consideration of learning organization characteristics. Responses to these questions were transcribed and coded (Merriam) to determine if responses indicated a learning organization as defined by Yukl.

Flexibility

Flexibility in a learning organization refers to the organization's acceptance of a variety of methods to accomplish a task. Flexibility allows organizational members to accomplish organizational tasks in a variety of ways and not always repeat methods implemented in the past (Yukl, 2002). During the interview process, the researcher noticed some examples of flexibility in the techniques used by department heads in two categories. The first category involved flexibility in the manner credit hours were assigned and the second category involved flexibility in the delivery of specific courses.

In describing flexibility in assigning classes and credit hours *Department head one* stated "We tend to do the same thing each semester unless a faculty member sees the need for a change or has a desire to do something different." *Department head one* further stated "We don't have that much (flexibility) in the sense each faculty member is assigned 12 hours, occasionally under 12, but we get creative to make it look like 12." *Department head two* had a similar description of how flexibility was incorporated. "I have had a lot of flexibility to a certain point (the academic dean) has always been willing to listen to what I am asking for if it is a reasonable request. The biggest gray area being how much load credit is given for specific responsibilities." The department heads, while being limited to each faculty member being allotted 12 credit hours, were flexible in the assignment of these 12 hours or in the method used to determine what constitutes the 12 credit hours.

Three other department heads described flexibility within the 12 credit hour limit in a similar manner. *Department head three* expressed:

Curriculum is one area that almost everyone can teach but primarily faculty stay at 12 credits and within their specialty area. What you taught last year is what you will teach this year unless faculty expresses the desire to change. We have the ability to be flexible. I have suggested some changes in the past but I keep in mind that it will be a new prep. Faculty members sometimes offer to make a change and occasionally we make changes.

Department head six stated:

We are pretty flexible. One of the reasons faculty enjoy working in this department is we approach workloads with a very collaborative point of view. First what do we need to teach, then what do we want to teach, and what does that leave us.

Department head eight stated:

In terms of teaching load we might be one of the more flexible departments on campus in the sense that I don't set down with a list of courses and start matching people up. What we do is approach the faculty and ask, what would you like to teach? We then consider the classes that need to be taught. Everyone must teach some of the general education classes and the remainder of their load goes to classes they wanted to teach. Everything is based on a 12 hour teaching load but overload pay does not kick in until 15. We are flexible in how we assign general education courses combined with upper division courses.

Each department head mentioned the limiting factor of assigning each faculty member 12 credit hours but further noted flexibility in allowing faculty members to choose, to a certain extent, what they teach with respect to classes that need to be offered.

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A different type of flexibility in managing faculty work that involved the manner in which classes were taught was noted as well. Three department heads described flexibility in their department in a manner that involved how the work of a single class was divided. *Department head five stated*:

One area of flexibility, if I can use it as an example, is if we have three faculty members that teach a particular class with 45, 50 minute sessions. Each instructor will have 15 sessions. If an instructor has other duties that are requiring too much of their time, the number of sessions can be dropped to 10 for them and another instructor will take over the five sessions.

Department head five uses flexibility in how a class is delivered to adjust the distribution of faculty work. The division, among faculty members, of the work of a single class was described in two other departments. *Department head four stated"* we try team teaching but sometimes it is difficult to determine how the faculty work will be assigned. For instance two professors taught a class, both were there all the time, and both got full faculty work load credit for the course." In a similar circumstance, *Department head seven* discussed flexibility in the instruction of a class:

We are flexible in the courses that we offer and how those courses are taught as well. Some instructors share responsibility of a single class. The two teachers divide the courses equally and on one occasion the adjunct took one credit and the instructor on campus took two.

The 12 credit hour load per faculty member seems to lack flexibility but department heads have flexibility in both the amount of credit that is given for a specific

task, as well as allowing two faculty members to receive at least partial credit for a single class.

Experimentation

Experimentation in a learning organization refers to how an organization allows members to try new ideas and test methods to increase organizational knowledge (Yukl, 2002). Five of the eight department heads interviewed mentioned experimentation specifically in allowing faculty members to try out new ideas. *Department head one* stated "we don't experiment unless a faculty member wants to change or I want them to try something new". *Department head three* stated "what you taught last year is what you will teach this year unless faculty expresses the desire to change… faculty members sometimes offer to make a change and occasionally we make changes." *Department head six* said "typically we operate with the idea if you feel passionate about trying something new then try it." *Department head seven stated* "We test ideas when someone has a heart for something new we usually just try it out for a semester and see how it works." *Department head eight* echoed in a similar manner "when someone in the department comes up with a new idea, other department members offer opinions and if the consensus is approving the idea then we try it for that semester. There is a lot of input from the faculty." The quotes from these six department heads illustrate a willingness to experiment with new ideas.

Three other department heads demonstrated experimentation in a slightly different manner. *Department head two* explained how the academic dean allowed experimentation "the dean has always been willing to listen to what I am asking for if it is a reasonable request." *Department head four* stated "we try team teaching but it is

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difficult to determine how the faculty work will be assigned… we don't do that often but is does allow faculty to change the amount of work during a semester." *Department head five* explained another type of experimentation "we are limited in how much we can experiment because each faculty member has an area of expertise, one thing we have done is teaching in small groups rather than all one on one, this works out best if the students are close to the same skill level and if we have enough resources."

Department heads at the University allowed for experimentation within their department by allowing faculty members to try new ideas on faculty credit assignments as well as allowing experimentation on the delivery of certain courses. Experimentation was demonstrated in some manner by the leaders of the eight departments that participated in the interviews.

Knowledge from Outside Sources

In a learning organization, knowledge from outside sources refers to knowledge that is brought into the organization from individuals or groups outside the organization or knowledge that is acquired from the study of other organizations (Yukl, 2002). Six of the department heads interviewed mentioned the discussion of faculty work with other department heads in formal and informal settings. *Department head one* described a technique borrowed from another department in supervising practicum students "we borrowed this from another department and we now base (practicum supervision) on meeting with the students once per week, if this can be done at the same time then additional credit is not given." *Department head six* discussed using other department heads as a resource as well:

There are a couple of department heads that I use as resources because of the

amount of time they have worked with the University. We discuss informally

ideas and what they are doing in their department. I depend heavily on them for

advice on how to run several aspects of the department.

Department head seven also discussed the sharing of information among department

heads at the University:

Department head meetings you pick up information over the years, much of it on

an informal basis. With the use of email, you can also communicate effectively

with other departments when you need feedback about a new idea. For instance, I

asked several departments the step by step process they go through when they hire

new faculty. I found out that even though no formal system was in place we all

we doing about the same thing.

Department head eight mentioned discussion of faculty work with other department

heads to a lesser degree:

I don't know of a formal mechanism to share information among departments.

We have department head meetings where we occasionally discuss workload, but

it usually becomes discussion of how we are overworked… from time to time

department heads informally discuss what they are doing in the department.

Department head five described some communication with other departments but also

included the Academic Dean as a source of outside knowledge. "Department heads

discuss faculty workloads on occasion but it most often occurs between department heads

and the dean when determining the number of instructors that need to be hired."

Five of the department heads interviewed described how knowledge was brought to their department from sources outside the University. *Department head two* stated "we communicate with similar schools and try to find out what other schools do… at conference meetings it is discussed as well… I attend workshops and a professional convention that allows for sharing with similar schools." *Department head four* also described acquiring knowledge from outside the University:

> I know an instructor at another university and we have corresponded. I also have visited other universities. This instructor shared the number of classes taught as well as the number of students she served and I filed this information in the back of my mind for later consideration.

Two other department heads noted the importance of professional conferences as a source of outside knowledge. *Department head five* stated "our department is fairly unique so the majority of information comes from professional conferences" and *department head seven* stated "I attend association meetings and when you get together with other departments a tremendous amount of information is shared. I would say that a department head is missing out if they are not attending conferences with the information they provide."

Finally, a unique source of outside information was revealed by *department head six* "We also consider comments from supervisors of our student teachers to see if what we are teaching is what we need to be teaching and we have changed assignments in order to better meet these needs."

Interviews of department heads revealed a variety of methods in which knowledge was brought into the department. Some of this knowledge came from within

the University from other department heads and the academic dean. Other knowledge came from outside the University from conversations with colleagues at other universities or during professional conferences.

Diffusion of Knowledge

Diffusion of knowledge in a learning organization refers to the sharing of relevant information among all members of an organization as new ideas and innovations are discovered (Yukl, 2002). Six of the department heads that were interviewed noted the lack of a formal mechanism of disseminating information. *Department head one* stated "I think we are our own entity, on some levels we like to keep our little secrets… I mentioned we get creative but I really don't know what other people do." *Department head two* stated "we really don't discuss a lot among the heads of the different departments." The lack of dissemination of knowledge was noted by *department head three* "I have been here 25 years and don't remember a lot of conversation between departments" and *department head four stated* "I don't think a formal process of sharing information is in place." Two other department heads had similar responses with *department head five* stating "not much is shared between departments formally or informally" and *department head eight* stating "I don't know of a formal mechanism to share information among departments."

A few of the department heads discussed some dissemination of knowledge both between departments at the University as well as between department heads and the Academic Dean. *Department head five* said "department heads discuss faculty workloads on occasion but it most often occurs between department heads and the dean when determining the number of instructors that need to be hired." *Department head six* stated

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"we discuss informally ideas and what they are doing in their department; I depend heavily on them for advice on how to run several aspects of the department… in department meetings we discuss the levels of success, we critique ourselves to see if we were effective by what the students response was and were we able to manage the work we did that semester." *Department head seven* described another type of dissemination. "We also have discussions via email and talk about hot topics even during times when everyone cannot get together."

The traits of a learning organization include flexibility, experimentation, brining in knowledge and the diffusion of knowledge (Yukl, 2000). The department head interviews revealed numerous instances of incorporation of flexibility, experimentation, and bringing in outside knowledge in leadership practices. Flexibility was revealed in discussion of the various ways department heads divide work and the different methods of assigning credit hours. Experimentation was revealed in the descriptions given by department heads of circumstances where faculty members were allowed to try something new or the academic dean allowed the department head to experiment. Department heads brought knowledge into the organization both from other university departments and sources outside the University.

The department head interviews did not reveal a large amount of information on the diffusion of knowledge from on department to another. Many department heads described how their department was unique and did not share a large amount of information with other departments. Formal methods of sharing information were notably absent but a few informal instances were noted. In spite of the limited description

of department heads sharing knowledge, the overall description of leadership techniques would indicate University departments were functioning as a learning organization.

Research Question 6. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997)?

In order to determine if leadership techniques of department heads were consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997) person-to-person interviews were conducted (Merriam, 1998). Interview questions were developed with consideration of learning organization characteristics. Responses to these questions were transcribed and coded (Merriam) to determine if responses indicated a learning organization as defined by Morgan.

Single Loop Learning

Single loop learning refers to the ability to discover and correct mistakes in relation to current operating standards for an organization (Morgan, 1997). Each of the interview participants described at least one method or circumstance where adjustments were made to increase the effectiveness of current operating standards. *Department head one* stated:

> We generally don't change but in one instance we combined two courses into one
> section because the class and numbers allowed it. We actually reduced the load,
> this was done to equalize her workload and we also gave her a credit for
> administration of the program.

Department head two discussed a similar situation when adjustment in work assignments were made during the semester. "I won't say never, but it is not often. Unless a class doesn't make then we give another assignment to balance, once the school year has started very little changes are made." *Department head three* described another situation:

> Department heads are open to check in on faculty during the semester and informal conversations take place regarding how the semester is going. A lot of department heads are alert for faculty members that are overwhelmed. Some of the things that don't show up on a load card are the things that overwhelm faculty the most and these can be adjusted to lessen the strain.

Department head four mention two specific ways adjustments are made in current operating procedures:

> In a couple of ways we do, first we look at the final enrollments in the general education courses that we teach and attempt to balance differences with adjuncts or teaching assistants. If changes are made it is usually with the number of adjuncts. We have had to make adjustments because of accident or illness… a situation occurred where an instructors health did not allow them to effectively teach all of there courses and some of the work was given to another instructor.

Department head five described how students are involved in the process. "We have student forums that provide some feedback on how we are doing. We also have faculty meetings once per month where adjustments are occasionally made." *Department head six* described adjustments in the number of work study students assigned to a faculty member as well as adjustments in supervision responsibilities:

It is difficult to make major changes during the semester but we do make some

changes. For instance if a professor has an exceptionally heavy load then we can

assign more work study time to them. On one occasion the department had a large

number of student teachers and the observations were split up throughout the

department rather than handled by one person.

Department head seven mentioned two ways adjustments are made:

At the beginning (of the semester) some classes are larger than anticipated so

adjustments are made where possible to lessen the burden on an instructor

teaching an exceptionally large class. Evaluations also take place early in the

semester which provide feedback on how an instructor is doing and if they are

able to manage their current load. My door is always open so I usually find out

pretty fast if something is not working very well.

Department head eight described an instance of single loop learning as well:

During the semester we also determine how much time a particular class requires

in preparation because two courses may be three hour courses but require

differing amounts of preparation time. We do get together and evaluate what we

are doing and at that time faculty members will speak up.

Each department head described at least one leadership technique that allowed for

the promotion of single loop learning. The department head interviews would indicate

that University departments are evaluating programs to determine if they are meeting

established goals, which is an indicator of a learning organization.

Double loop Learning

   Double loop learning refers to an organization's ability to evaluate current operating norms to determine if a better system exists to carry out organizational tasks (Morgan, 1997). Four of the department heads offered descriptions of double loop learning that occurs within their department. *Department head three* described an example of double loop learning as follows:

   That (program evaluation) is an informal process as we discuss how we are doing. It usually involves work in the department that goes beyond courses that are taught. One faculty member approached me about teaching a graduate level course for another department. I said O.K. if they would give me someone who could take over the three hours lost from my department. It would not have worked if teaching the class would have fallen under extra duties. I gave their department three credits and they gave my department three in return.

Another description of double loop learning was provided by *department head six*:

   In department meetings we discuss the levels of success. We critique ourselves to see if we were effective and monitor what the students' response was for the semester. From this were we are able to determine how well we managed the work we did that semester as well as if we provided what the students needed. A small department such as ours is very sensitive to student evaluations and if a faculty member is overburdened it will show up.

   Two of the department heads mentioned the importance of alumni in the evaluation of current programs. *Department head seven* stated:

The biggest (evaluation of current programs) is our assessment that comes from

our alumni. We use alumni to determine what our graduates experience when they

enter the workforce. We also survey area employers to see what they think

students need. We also find a tremendous amount of information on how business

or the marketplace is changing.

Department head eight included both students and alumni in the process of double loop

learning:

There are several ways we evaluate what we are doing, two of these are alumni

input and student surveys. In addition when we have faculty work days we discuss

how things are going and anticipate changes that need to be made. Students give

us feedback on the content of our courses as well to determine if we need to adjust

content.

Two indicators of a learning organization are single and double loop learning.

Each of the department heads interviewed described situations in which their leadership

allowed for each type of learning to take place. Department heads at the University

displayed leadership characteristics that would indicate a learning organization.

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Summary

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Chapter four was a description and analysis of the data collected in the study.

Quantitative data was obtained through the use of a faculty work log and from faculty

credit hour assignment cards. Forty-three faculty members participated in the use of the

work log for the two week segments. While no significant correlations were discovered

between the number of faculty credit hours on faculty credit assignment cards and hours

logged by faculty members in the area of total time, time spent in teaching related

activities, time spent in administrative activities and time spent in advising activities a weak positive correlation was shown with total time logged and time in teaching related activities being the most notable.

Qualitative data was obtained from interviews of eight department heads to determine if their leadership practices were consistent with that of a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002). In addition, the qualitative data obtained was used to determine if the leadership strategies of department heads, in determining faculty workloads of the University, were consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997). The qualitative data provided insight on the leadership practices of department heads within the University. Department heads described circumstances in which flexibility and experimentation were practiced during the assignment of faculty work. Moreover, department heads described leadership practices that allowed for bringing in outside knowledge and single and double loop learning. While the number of descriptions of knowledge diffusion was limited, the overall leadership techniques of the University department heads would indicate the leadership styles are consistent with that of a learning organization.

In chapter five the researcher will present and overview of the study including the purpose of the study, the design and procedures of the study, the research questions of the study and a review of the research findings. Furthermore, the chapter five will include a discussion of the findings, the limitations and design controls, implications, and recommendations for future research.

CHAPTER FIVE

SUMMARY AND RECOMMENDATIONS

Introduction

The purpose of this study was to determine if faculty credit load assignments are

an accurate measurement of faculty work loads. "Faculty workload needs to be

continuously studied because of the unique nature of each discipline as well as to provide

evidence to determine heavy workloads are tied to negative student experience"

(Hinrichsen et al. 2002, p.14). Credit hour assignments have long been used to measure

faculty work in many types of institutions but little research has been conducted to

determine the accuracy of this method. Some academic disciplines place emphasis on

teaching and service while others are more concerned with research. This makes it

difficult to determine a universal definition of faculty work (Diamond & Adams, 2002).

An additional purpose of the study is to add to the knowledge base on the determination

or calculation of workloads, as well as identify management techniques of department

heads at a private university are reflective of leadership techniques used in a learning

organization.

This case study examined the relationship between faculty credit hour

assignments and the amount of hours logged by faculty members using a time log. In

addition, department heads were also interviewed to determine their leadership strategies

and to then determine if these strategies were consistent with that of a learning

organization as defined by Yukl (2002) and Morgan (1997).

The population for this study was composed of faculty members of a private

Midwestern liberal arts university. The study used faculty work logs to collect data on the

number of hours full time faculty were working as well as faculty credit hour assignment cards to determine the load assigned to the faculty member by the University. The University has ten academic departments and each department has a single faculty member that serves as the department head. Forty-three faculty members completed the work log for each week of the assigned period and several of the department heads participated in an interview process.

The data collected from the faculty work log and credit hour assignment cards was analyzed using the statistical package for the Social Sciences (SPSS) version 13.0. Tests were performed to determine if relationships exist. In addition, qualitative research methods (Merriam, 1998) were employed to determine the leadership techniques of department heads and to determine if these techniques were consistent with learning organizations as outlined by Yukl (2002) and Morgan (1997).

The primary research questions were as follows:

1. Are faculty credit hours a valid measure of faculty work as indicated by the relationship between faculty credit hours and total time engaged in work related activities?

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of total time logged by faculty in total work activities. An alpha level of .05 was used to determine significance.

2. Are faculty credit hours a valid measure of faculty teaching activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in teaching related activities?

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of time logged by faculty in teaching related activities. An alpha level of .05 was used to determine significance.

3. Are faculty credit hours a valid measure of faculty administrative activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in administrative activities?

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of time logged by faculty in administrative activities. An alpha level of .05 was used to determine significance.

4. Are faculty credit hours a valid measure of faculty advising activities as indicated by the relationship between faculty credit hour loads and the amount of time spent in advising activities?

A Pearson test for correlation (Fraenkel & Wallen, 2003) was performed to determine if the number of assigned faculty credit hours was a predictor of time logged by faculty in advising activities. An alpha level of .05 was used to determine significance.

5. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002)?

In order to determine if leadership techniques of department heads were consistent with the strategies within a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002) interviews were conducted. Person-to-person interview questions (Merriam, 1998) were developed with consideration of learning organization characteristics. Responses to these questions were transcribed and coded (Merriam) to determine if responses indicated a learning organization as defined by Yukl.

6. Are the leadership strategies of department heads, in determining faculty workloads of the University, consistent with the strategies within a learning organization that allow for both single and double loop learning as defined by Morgan (1997)?

In order to determine if leadership techniques of department heads were consistent with the strategies within a learning organization consistent with a learning organization that allow for both single and double loop learning as defined by Morgan (1997) person-to-person interviews were conducted (Merriam, 1998). Interview questions were developed with consideration of learning organization characteristics. Responses to these questions were transcribed and coded (Merriam) to determine if responses indicated a learning organization as defined by Morgan.

Findings of the Study

Research questions one through four were addressed with the quantitative data obtained from faculty credit hour cards and faculty work logs. Forty-three faculty members participated in completion of faculty work logs for two week periods. No significant correlations were discovered in the data analysis of research questions one

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through four. While not significant, a weak positive correlation was discovered in the data analysis of research questions one through three. Specific findings for research questions one through four are reported in the following paragraphs.

Results indicated a weak direct relationship between the number of faculty credit hours and the total time engaged in work related activities. While the results indicated a direct relationship the relationship was not deemed significant (see Table 1). Furthermore, faculty credit hours accounted for only six percent of the variance in total time logged by faculty. Analysis of the data for research question one revealed that assigned faculty credit hours were not a strong predictor of total work time logged by faculty.

For research question two a Pearson correlation was calculated and revealed no significant correlation between the number of assigned faculty credit hours and the time logged in teaching related activities (see Table 2). Results indicated a weak direct relationship between the number of faculty credit hours and the total time involved academic activities. Furthermore, faculty credit hours accounted for only 5.5 percent of the variance in total time logged by faculty. Analysis of the data for research question two revealed that assigned faculty credit hours were not a strong predictor of time logged by faculty in teaching related activities.

For research question three a Pearson correlation was calculated and revealed no significant correlation between the number of assigned faculty credit hours and the time logged in administrative activities (see Table 3). Results indicated a weak direct relationship between the number of faculty credit hours and the total time in administrative activities. Furthermore, faculty credit hours accounted for only three

percent of the variance in total time logged by faculty. Analysis of the data for research question three revealed that assigned faculty credit hours were not a strong predictor of time logged by faculty in administrative activities.

For research question four a Pearson correlation was calculated and revealed no significant correlation between the number of assigned faculty credit hours and the time logged in advising activities (see Table 4). Results indicated no relationship between the number of faculty credit hours and the total time in advising activities. Analysis of the data for research question 4 revealed that assigned faculty credit hours were not correlated to the number of hours logged by faculty in advising activities.

The qualitative findings from the interviews provided responses to research questions five and six. Coding for the data obtained was guided by the principles of a learning organization that encourage flexibility, experimentation, acquiring knowledge from sources outside the organization, and the diffusion of knowledge Yukl (2002). Coding was also guided by the principle of a learning organization that allow for both single and double loop learning as defined by Morgan (1997).

Analysis of the data collected for research question five revealed that department heads at the University were using leadership strategies that allowed for flexibility, experimentation, and the acquiring of knowledge from outside the organization. While descriptions of the diffusion of knowledge were limited, the overall leadership techniques of department heads were consistent with the principals of a learning organization.

Analysis of the data collected for research question six revealed that department heads at the University were using leadership strategies that promoted both single loop and double loop learning. Descriptions provided by the department heads indicated

ongoing evaluation of organizational operations in regard to current operating procedures as well as evaluation of the effectiveness of these norms in regard to the overall mission of the department. Data analysis supported that department heads were demonstrating leadership techniques that were consistent with a learning organization.

Discussion of the Findings

The Pearson correlations calculated for research questions one through four revealed no significant correlations between the number of faculty credit hours assigned and the number of hours logged by faculty in the areas of total time in work related activities, time spent in teaching activities, time spent in administrative activities and time spent in advising activities. The findings suggest that faculty credit hours may not be the best measure of faculty work which is also suggested by Scarlet (2004). Other studies have described difficulty in assessing faculty workloads because of the complex nature of faculty work (Porter & Imbach, 2000).

While not significant, the Pearson correlations did reveal a weak positive relationship between assigned faculty credit hours and the time logged in three of the four work categories. The strongest correlation was calculated to be between assigned faculty credit hours and the total time logged by faculty. Faculty members at the University usually have an assignment of 12 credit hours and faculty members work between forty and fifty hours per week regardless of the type of activity. Other studies have described consistency in the total amount of time faculty work (Milem, Berger, & Dey, 2004; Meyer, 1998). The correlation between assigned faculty credit hours and time spent in teaching related activities was nearly as strong as that of total time. Teaching activities account for the majority of faculty work at non research based institutions (Watts, 2004)

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and would also account for the majority of the 12 credit hour assignment. The weak positive correlation between faculty credit hours and administrative activities could be due to administrative activities not being equally distributed among faculty (AAUP, 2000). No correlation was revealed between credit hour assignments and time spent in advising activities. Other studies have noted inconsistencies in advising time because of the wide variety of interest of faculty in advising and the variance of skill faculty have in advising (Milem et al., 2000).

The lack of strong correlations between faculty credit hour assignments and the various categories of faculty work in the study have been suggested by other research because of the wide variety of activities that encompass faculty work. The correlations between faculty credit hours assignments and the types of activity became weaker as the description of the activities became more specific.

The qualitative data obtained from interviews for research questions five and six did reveal information on the leadership practices of department heads at the University. Each of the department heads interviewed demonstrated some type of flexibility in their leadership practices. Six department heads described flexibility in the methods of assigning faculty credit hours so long as the work was completed in a desirable manner. Yukl (2002) defined a learning organization in a similar manner by describing a learning organization as an organization that is flexible in accepting a variety of methods to accomplish a task. Three department heads also described flexibility in the manner in which courses were delivered by mentioning situations where the work of a single class or sections of the same class was shared faculty members. Collaborative efforts that were described were similarly noted in other faculty workload studies as a means to adapt to

changing environments and increase productivity (Walvoord & Poole, 1998; Scarlet, 2004).

Several department heads, through interview statements, demonstrated their leadership style allows for experimentation within the department. Department heads described instances when a faculty member had a new idea and was allowed to try it out to see how well it worked. Organizations that allow members to try new ideas and test methods are faster at developing new knowledge (Yukl, 2002). Furthermore, universities that monitor the environment and allow group members to form opinions strengthen the learning environment (Leithwood, Jantzi, & Steinbach, 1998). The experimentation that was permitted and encouraged by department heads indicated a learning organization.

Department heads at the University also illustrated how outside knowledge is brought into the department. One department head described a technique borrowed from another department in supervising practicum students while others described discussions with other University faculty or with other professionals at conferences. This type of social interaction facilitates learning and the bringing in of outside knowledge (McCombs & Whisler, 1997). Learning that takes place within higher education usually begins with a problem the organization has not encountered before and outside information is often helpful in developing a remedy for these problems (Hansen, 2001).

Analysis of department head responses regarding the diffusion of knowledge revealed that this area was limited in leadership practices. Several of the department heads described their departments as separate organizations and said their individual department did not share information to a great extent with other departments. Yukl (2002) defined the diffusion of knowledge within a learning organization as the sharing

of relevant information. Academic disciplines are unique and therefore the amount of information available to share can be limited (Diamond & Adams, 2000).

Interview responses from the department heads at the University also demonstrated how their leadership provides for single loop learning. Department heads mentioned specific ways adjustments are made in current operating procedures which Morgan (1997) defined as single loop learning. Several department heads noted how students and faculty members provide feedback during the semester as to how the current system is working. These routines were suggested by Hansen (2001) as an effective mechanism to promote single loop learning.

Finally, department heads demonstrated leadership practices that allowed for double loop learning. Morgan (1997) defined double loop learning as an organization's ability to evaluate current operating norms to see if a better system exists to carry out organizational tasks. The double loop learning described by the department heads involved alumni surveys and discussion among faculty members within the department. In these situations organizational learning takes place in order for the problem to be solved in a manner not previously implemented by the organization. This type of organizational learning is a result of double-loop learning and helps colleges and universities adjust to a changing environment (Hansen, 2001).

Implications for Practice

The pursuit of this study was to determine if assigned faculty credit hours are a reasonable measure of faculty work. In addition, the study attempted to determine if the leadership techniques of department heads were consistent with leadership strategies of a learning organization. The study revealed no significant correlation between faculty

credit hours and the time faculty spent at work, in teaching activities, in administrative activities and advising activities. The study, while not significant, did reveal a weak positive correlation between assigned credit hours and three of the four activity categories. When this quantitative data is interwoven with the information revealed in the qualitative portion of the study, useful information is revealed about the methods department heads use to make the faculty credit hour system function effectively within the organization.

The variables of assigned faculty credit hours and total time spent in work related activities, while not statistically significant, were weakly correlated and may suggest that assigned faculty credit hours could be a measure of faculty work, especially if the formula for determining faculty credit hours involved other activities that encompass faculty work. Faculty work is extremely diverse depending on the discipline, therefore, a universal definition that only considers faculty credit hours is not adequate (Diamond & Adams, 2002; Hinrichsen et al. 2002). When the specific work activities of teaching, administration, and advising were isolated, the correlations were weaker in addition to not being considered statistically significant. This further indicates that faculty work is too diverse to effectively measure with the single variable of assigned faculty credit hours. It should also be noted that formulas for calculating faculty work can become too detailed and the end result may be a lack of flexibility or collaboration as work is assigned (H. B. Altman, personal communication, February 24, 2006). The information provided by department heads during the interview process revealed how individual departments are managing faculty work by functioning as a learning organization and adapting as the environment changes.

The characteristics of learning organizations outlined by Yukl (2002) of

flexibility, experimentation and bringing in knowledge from outside the organization

were clearly present in the individual departments at the University as indicated by the

department heads. The implication being that each department is functioning as a

learning organization as faculty work in the department is managed. Faculty workloads

should be established at the department level as department heads have the best sense in

determining if faculty are overworked (H. B. Altman, personal communication, February

24, 2006). The lack of dissemination of information between the departments at the

University suggests that each department is indeed functioning as an individual

organization and faculty workload management could be improved with the sharing of

information and management strategies among the departments at the University. This

sharing of knowledge is limited by the uniqueness of each department.

The individual departments at the University demonstrated the ability to acquire

knowledge via both single loop learning and double loop learning which are defined as

characteristics of a learning organization (Morgan, 1997). The data collected from

department head interviews revealed that departments at the University had evaluation

mechanisms in place that allowed for the monitoring of the departments ability to achieve

current operating goals as well as the evaluation of the effectiveness of these goals in

accomplishing the mission of the department. The wide variance in the descriptions of

faculty work within individual departments can cloud the issue as well and is best dealt

with at the department level (Massey & Wilger, 1998). In other words faculty work can

appear to be unequal within academic departments as well as from one academic

department to another. The best faculty workload formulas contribute to an overall sense

of fairness in an organization rather than limiting departments in how faculty work is assigned (H. B. Altman, personal communication, February 24, 2006). The implication may be that the individual departments at the University are operating as learning organizations and therefore need to continue to develop new ways of measuring and assigning faculty work within the department. In other words, it may be difficult to apply a universal method of assigning faculty work to each academic department at the University unless the universal method is flexible enough to account for department differences.

The results of the study have implications for similar liberal arts universities in respect to the overall function of the institution. Universities should have characteristics of learning organizations in order to adapt to economic and social changes in the environment. Change in higher education is normally slow to take place but institutions with systems in place to encourage organizational learning can better adapt to changes in economic, social, and technologic environments (Birnbaum, 2001).

Limitations, Assumptions, and Design Controls

One of the limitations of case study research involves the application of findings to other organizations. Case studies have value however when seeking to determine how one organization differs from another or when seeking to determine the internal operations of an organization (Thomas & Brubaker, 2000). "The case study is a useful approach that can be applied to diverse academic disciplines in varied contexts" (Thomas & Brubaker, p. 109). A case study approach is useful when complex problems can be addressed through an intense and rich analysis of a specific organization that can be used as a comparison for similar institutions (Merriam, 1998)

Much of the data used to measure faculty workload is reliant on the accuracy of data collected in surveys and work logs completed by institution administrators along with faculty members. While every effort was made to gather accurate data of full and part time faculty workloads, the study did not completely account for varying interpretations of faculty work assignments and individual reporting of this data. The study was a case study of a single Midwestern university and findings may or may not be applicable to other university settings. Each department at the University employs one faculty member as a department head and the University employs just less than 100 full time faculty members. The university has very little turnover in faculty with many professors having been with the university for more than 20 years. The University has been described as an excellent Christian place to work by the faculty in independent surveys. The University leadership above the department head level has also been very stable. The unique characteristics of the leadership at the University make it an excellent place to conduct a case study.

The results from the study illustrated the complexity of faculty work and the difficulty in measuring that work at a specific University. The Carnegie Foundation (2005) classifies more than 250 institutions as being similar to the University in the study so knowledge revealed by the study could have application to other similar institutions. While the institution where the study was conducted was similar to many others, the generalizability of the findings is limited. The study did shed light on how the University department heads implemented leadership techniques that encouraged organizational learning which could be applied in other higher educational settings. The study was also limited by the number of faculty participating. This study used descriptive research

methods to determine how faculty members spend their workday and participants were trained on the use of the faculty work log. Similar studies have considered data from comparably sized samples due to the fact that individual institutions are not excessively diverse from one another (Hinrichsen et al. 2002). The design of the faculty work log allowed for daily accounting of time spent in activities throughout the day. Nearly half of the possible 92 participants were involved in the work log aspects of the study and eighty percent of the department heads were interviewed in the study so a quality representation of the University was likely obtained both in the amount of work reported using the work log and leadership techniques discussed during the interview process.

Recommendations for Further Research.

While the study revealed no significant correlations it was not likely due to the number of participants in the study or the fact that the study was carried out at a single institution. Several studies have used the self report or work log method to gather data on how faculty members are spending time during the work day (Glazer & Henry, 1994; Hinrichsen et al. 2000; Harter, Becker, & Watts, 2004). Additional studies where individual faculty members make use of faculty work logs various days throughout the semester rather than a two week period could reveal more of an average work day for the faculty member. Preskill and Torres (1999) offer that one of the best methods for organizations to learn is through reflection and dialogue on ways to improve for the future. Completing work logs is an effective way of stimulating discussion on faculty work without starting a discussion of how faculty members are overworked. Additional faculty work studies could assist in the development of a more comprehensive definition of faculty work (Diamond & Adams, 2002).

One of the aspects of faculty work that is not included in the completion of faculty work logs is faculty productivity. The number of hours logged by faculty members is not necessarily an indication of the amount of work that is accomplished. Additional research on the productivity of faculty could be beneficial (Kezar, 1999) especially if the number of hours worked could be related to graduates of a program or student success rather than research productivity.

The study did reveal how the academic departments at the University were functioning as a learning organization. Similar studies at other universities might be useful to determine if individual departments were functioning in a similar manner or if the leadership at the University as a whole was consistent with that of a learning organization. Yukl (2002) described the need for competitive organizations to have mechanisms in place that allow for organizational learning. Some smaller private institutions have recently flourished because of the adaptability of the education programs they offer and the ability to change these programs in a timely manner. Any study that could assist higher education in adapting faculty work to changing economic and technologic conditions could be beneficial (Yuker, 1984). One area of faculty work in need of study is online and distance education and the work involved in the instruction of these courses (AAUP, 2000).

The University involved in the study was a small, private institution in the Midwest. Additional information could be revealed if the study were conducted at other universities of different sizes with different characteristics or public institutions rather than private. In addition, academic disciplines have characteristics that are unique. Rather than focusing on all of the departments at a single institution research carried out in

similar departments at different universities could reveal additional, useful information. Diamond and Adam (2000) described the uniqueness of each academic discipline and therefore the non uniform types of work that occur in a single institution. In other words, the management of faculty work may be unique for each academic discipline rather than unique for each institution.

A final recommendation for further research would involve the system the University uses to regulate faculty work assignments. Many universities no longer classify faculty work according to the number of classes taught but rather consider a variety of faculty activities the encompass faculty work. Several universities use complex work load formulas (H. B. Altman, personal communication, February 24, 2006) and useful information could be generated from studies of the effectiveness of these formulas.

Conclusion.

The purpose of this study was to determine if assigned faculty credit hours were an accurate measurement of faculty work. In addition the study attempted to determine if the leadership within each academic department within the University was consistent with that of a learning organization. While no statistically significant correlations were discovered the study did contribute to the knowledge base in the area of faculty workload management. The study determined that department heads at the University were using leadership techniques that were consistent with that of a learning organization. The study provided useful information on the various leadership techniques that department heads implement as they lead in the complex environment of higher education. In the study productivity studies and studies of individual departments within universities were offered as suggestions for further research.

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Appendix A

Basic instructions: Keep this grid either minimized on your computer or in paper. In each 15-minute box, place the letter that corresponds to the category (see separate sheet). <u>Leave blanks for time spent on personal business or activities that fit nowhere else</u>, such as mailing a letter. It is rarely acceptable to fill in your whole day from memory, as accuracy is the main goal for this project. You will be reminded by email each week to send electronic forms to Matt Stringer who will record your participation.

A	**A**cademic	G	**G**raduate/degree completion	S	**S**ocial/wellness
C	**C**ommunity	M	**M**arketing/recruiting	T	**T**ravel with students
D	**D**evelopment (professional)	O	**O**rganization/ administration	V	ad**V**ising
E	**E**xtra-curricular/ students	P	**P**ractices/rehearsals/ plays	Z	**Z** – illness/ emergency
F	**F**aculty prayers/chapel	R	**R**esearch	**Key (See separate sheet for details)**	

Weekly Segments (15 Minutes)							
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Automatic Category Tally								
0	A	**A**cademic	0	G	**G**raduate/degree completion	0	S	**S**ocial/wellness
0	C	**C**ommunity	0	M	**M**arketing/recruiting	0	T	**T**ravel with students
0	D	**D**evelopment (professional)	0	O	**O**rganization/ administration	0	V	ad**V**ising
0	E	**E**xtra-curricular/ students	0	P	**P**ractices/rehearsals/ plays	0	Z	**Z** – illness/ emergency
0	F	**F**aculty prayers/chapel	0	R	**R**esearch			

Appendix B

Categories for AQIP Workload Grid

Academic Activities (except advising as part of scheduling)
- Lecturing or teaching classes
- Teaching "labs" or "problem sections" or "activities" or "study sessions"
- Preparing for teaching lectures, labs, etc.
- Grading/evaluating student papers, exams, etc.
- Supervising student practica or observing students in the field
- Reviewing resumes/writing recommendation letters
- Mentoring/supervising undergraduate research
- Supervising/planning internships or independent study activities
- Other_____

Community Involvement
- Supervising students involved in community service projects
- Donating community service that is "required" by my University position
- Donating community service that I would be doing even if I weren't at the University
- Other_____

Development (professional)
- Attending professional conferences and professional development programs
- Reading academic material beyond class preps to be current in my field
- Attending concerts/performances beyond class preps to be current in my field
- Dialoging with colleagues on academic topics
- Innovating/thinking/planning/creating (beyond preparing syllabi)
- Other_____

Extra-Curricular Activities/ Student
- Supervising/mentoring student organizations, student government, student clubs, etc.
- Supervising student media activities
- Other_____

Faculty Prayer/Chapel Activities
- Attending chapels, faculty prayers, etc.
- Preparing music, messages, etc. for chapel, prayers, etc.
- Other_____

Graduate and Degree Completion Programs
- Advising/mentoring graduate student/DCP
- Teaching graduate or DCP courses
- Preparing for graduate or DCP courses
- Supervising graduate student research
- Other_____

Marketing, Recruiting, Fund Raising
- Recruiting/communicating with prospective students
- Mentoring/contacting alumni
- Marketing/PR & community interfacing
- Raising funds
- Speaking to groups on or off campus (<u>because</u> of my University position)
- Other_____

Organization/Administration
- Working with Project Envision activities
- Working with accreditation activities
- Assessing for department or school-wide evaluations
- Preparing department/faculty meetings
- Budgeting/administering departments
- Attending/planning committee activities at The University
- Working for professional organization/society activities beyond The University (regional, national, etc.)
- Producing extra programs for campus events (e.g. homecoming)
- Caring for facilities – athletic, drama, music, lab, etc.
- Managing student employees/"work studies"
- Working with registration activities and related functions (not advising)
- Administering safety & health/wellness
- Other_____

Practices, Rehearsals, Performances
- Attending ("required by my position") major music concerts and senior recitals held after hours
- Attending extra rehearsals in preparation for degree recitals
- Supervising/coaching team practice/drama practice etc.
- Attending games/concerts/dramas/etc. (day or night) activities ("required by my position")
- Watching game films to plan practice and game strategy
- Attending coaches' meetings
- Other_____

Research
- Conducting research <u>without direct student involvement</u>
- Other_____

Social Activities, Breaks
- Attending department/student social activities
- Attending extra-curricular clubs, homecoming, class social activities
- Conversing informally/spontaneously with students & colleagues
- Taking coffee /lunch break
- Walking/"working out"/etc. during "campus hours"
- Other_____

Travel with Students

- Traveling with students to professional/scholastic/performance meetings/competitions
- Traveling with music groups that represent The University
- Traveling on mission trips/performance trips etc. with students
- Preparing/planning for off-campus travel activity
- Traveling to away games ("required by my position")
- Other_____

ad**V**ising

- Scheduling or counseling <u>assigned advisees</u>

Z   Because of illness or emergency, absent from time normally working

Appendix C

Department Head Interview

1. Flexibility

    a. How would you describe the level of flexibility in determining workload
assignments for your academic department?

2. Experimentation

    a. As a department head, how often do you try new methods or experiment with
faculty workload assignments?

3. Outside Knowledge

    a. Describe any circumstances where information from other departments or other
universities has been considered when determining faculty workload assignments for
your department.

4. Diffusion

    a. Describe how information on assigning faculty workloads is shared with other
University departments.

5. Single-loop Learning

    a. Describe any techniques used to evaluate faculty work assignments each
semester.

6. Double-loop Learning

    a. Describe any techniques used to evaluate the current system of assigning
faculty work.

VITA

Matt Stringer was born July 11, 1967, in Springfield, Missouri. After attending public schools in Springfield, Missouri, he received the following degrees: B.S. in Chemistry Education from Evangel College (1990); M.S. in Education Administration from Missouri State University (1997); Ed.D in Educational Leadership and Policy Analysis from the University of Missouri-Columbia (2006). He is married to the former Pam Sanders of Springfield, Missouri, and is presently a member of the Education Department of Evangel University, Springfield, Missouri.