Redefining Faculty Workloads in a Physical Therapy Department: A Case Study

Douglas C. Keskula
Shelley Mishoe
Old Dominion University, smishoe@odu.edu
Elizabeth T. Wark

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Original Publication Citation

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The purpose of this case study is to describe the creation and implementation of a sustainable workload model in the physical therapy department, as well as the outcomes resulting from that structure. Between 2002 and 2009, both scholarly productivity and faculty practice activity increased as a result of the redistribution of faculty efforts created by the new workload structure. This case demonstrates how the department has been able to successfully expand research and faculty practice while maintaining a high-quality educational experience. The workload guidelines have enabled the collective core faculty to be productive in teaching, research/scholarship, and service.

Faculty workloads are an important issue to external and internal stakeholders including legislators, administrators, faculty, students, and parents. Faculty and administrators consider workload models as they grapple with pressing internal factors such as clarity of duties, merit pay, salary, tenure, post-tenure, promotion and a desire for equity. A number of external factors are increasing the pressure on institutions of higher education to account for expenditures and effort, particularly faculty payroll.

Faculty workload refers to how much a faculty member has to do and is commonly measured by the amount of time spent on teaching, research, administration, and service, whereas faculty productivity is an estimate of the efficiency and effectiveness of a faculty member in achieving professional standards. Faculty workload is often based on the mission and type of the institution. The American Association of University Professors (AAUP) statement on faculty workload attempts to define the workloads, but acknowledges there is not a universal standard or ideal. The need to balance the teaching, research and service needs of the faculty is important for the success of both the individual faculty and the program/institution. Managing these competing priorities can be difficult for faculty and administrators alike, and are identified in multiple workload studies in health-related disciplines.

The ability to successfully engage in scholarship is crucial for the viability of faculty members in terms of promotion and tenure. In addition, the expectation of scholarly productivity for faculty in allied health, specifically in physical therapy (PT) education, is directly linked to successful program accreditation. Scholarly productivity has been examined in allied health programs.

One challenge in the College of Allied Health Sciences (CAHS) at Georgia Health Sciences University (GHSU) was to develop a faculty workload structure to support the educational mission of the PT program while expanding the research and service missions. While service in higher education often includes activities such as contributions to committees and faculty governance, an expectation for clinical practice also exists within the health professions. In this case study, enhanced service was intended to focus on an increase in faculty practice. The desired outcomes were to create a productive balance among teaching, research, and service to better align the department with the tripartite mission of the institution and to enhance faculty development.

The purpose of this case study is to describe a sustainable workload model in the PT department as well as identifying the outcomes resulting from that structure.

Case Presentation

GHSU CAHS offers one of four state supported PT programs in Georgia, and the only program offered in an Academic Health Center. A hallmark of the program has been the use of innovative and team teaching methodologies in a student-centered learning environment. The program has been successful with continuous programmatic accreditation since its...
inception in 1970, and program graduates are in high demand.  
In 2002, the PT faculty were disproportionately allocated in supporting the educational mission with too little emphasis on scholarship and limited opportunities for faculty practice. At this point in time the department utilized an extremely faculty intense problem based learning (PBL) model to deliver the masters entry-level curriculum. With an increase in both the institutional and professional accrediting body’s expectations for sustained faculty scholarship, faculty responsibilities within the department needed to evolve. Another compelling reason for optimal faculty effort alignment was the realization that the department would be creating and implementing a doctor of physical therapy (DPT) program in the ensuing years with additional demands on the faculty for research and practice.

Faculty Workload

The workload guidelines were developed in accordance with existing University and College policies to provide a framework that would be equitable and consistent across faculty and ultimately across departments. The faculty teaching load is based on full-time effort within a 12-month contract. In these guidelines, the recommended teaching load for all full-time faculty is 24 course hours/calendar-year for those faculty with a 100% teaching effort. For example a faculty with 0.5 teaching commitment would be responsible for 12 credits of teaching over the course of a calendar year. We defined credit hours as the credit hour value of the courses taught. The teaching full-time equivalent (FTE) represents the amount of faculty resources/time dedicated to teaching. This can be used for individual faculty and can then be compiled as a composite value for the total faculty effort. Composite faculty workload distribution in the PT by department for the time period 2002 through 2009 is presented in Table 1.

Table 1. PT Faculty Composite Workload Distribution

<table>
<thead>
<tr>
<th>Faculty Workload Distribution</th>
<th>Total FTE</th>
<th>Teaching</th>
<th>Research</th>
<th>Service</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>11.55</td>
<td>7.55</td>
<td>1.90</td>
<td>1.30</td>
<td>0.80</td>
</tr>
<tr>
<td>2003</td>
<td>11.55</td>
<td>6.70</td>
<td>2.80</td>
<td>1.15</td>
<td>0.90</td>
</tr>
<tr>
<td>2006</td>
<td>11.40</td>
<td>6.25</td>
<td>3.10</td>
<td>1.25</td>
<td>0.80</td>
</tr>
<tr>
<td>2009</td>
<td>12.40</td>
<td>6.80</td>
<td>3.25</td>
<td>1.30</td>
<td>1.10</td>
</tr>
</tbody>
</table>

The teaching workload metric was further expanded to consider actual teaching contact hours to account for the differences in laboratory courses that consume more clock hours yet do not yield commensurate credit-hour production. Contact hours were defined as the hours per time period (week, semester, year) of formal class meetings. Class meetings included lecture, labs, discussions, student presentations, small group activities, cases, PBL and any other formal learning activity that required faculty time with students. Faculty time spent meeting with students during office hours or co-curricular activities were not included in contact hours for teaching. Total contact hours are presented in Table 2.

The next step was to apply the metric to determine the number of dedicated teaching faculty required to meet the educational needs of the department. A minimum of 6.75 composite teaching faculty effort was required using the workload metric. The 6.75 FTE figure enabled us to continue to provide appropriate faculty participation and content expertise to teach didactic and lab-based courses while maintaining our preferred method of team teaching as appropriate. Composite workload values enable individual faculty to achieve acceptable levels of productivity consistent with their workload allocations. Faculty who have a heavier allocation to teaching primarily support the educational mission while faculty with larger research allocations support the research mission, with each contributing to the aggregate departmental productivity and success.

In addition to teaching, each faculty has a percentage of time allocated to scholarship/research and service. At that time, no minimal FTE composite for scholarship or service existed within the department, in part due to the disproportionate emphasis on teaching. Historically individual faculty members had at least 10% effort dedicated to scholarship and 10% to service activities. Several faculty also have allocations to recognize administrative responsibilities within the department and include the chairs of the curriculum, clinical education, research, and student affairs committees. These allocations are depicted in Table 1. Workload percentages are negotiable on appointment and examined annually with consideration to the needs of the program. Every attempt is made to balance faculty developmental goals, existing faculty expertise and departmental needs in the determination of the number of dedicated teaching faculty required to meet the educational needs of the department.

Table 2. Educational Needs for Each Curriculum Model

<table>
<thead>
<tr>
<th>MPT PBL</th>
<th>MPT Case-based</th>
<th>DPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total contact/clock hrs for the curriculum*</td>
<td>1361</td>
<td>1361</td>
</tr>
<tr>
<td>Total assigned contact/clock hrs for curriculum†</td>
<td>5681</td>
<td>2474</td>
</tr>
<tr>
<td>Credits</td>
<td>103</td>
<td>103</td>
</tr>
<tr>
<td>Total students</td>
<td>88</td>
<td>88</td>
</tr>
</tbody>
</table>

* Total contact/clock hours for the curriculum: Number of contact/clock hrs in class (didactic/lab) for the curriculum, excluding clinical education—e.g., 3 credit course (1 lecture, 2 lab credits) with 75 contact hrs. Semesters are typically 15 wks. For lecture, 1 credit hour is equivalent to 1 contact hr/wk. For lab, 1 credit hour is equivalent to 2 contact hrs/wk.

† Total assigned contact/clock hours for the curriculum: Contact/clock hrs/class multiplied by the number of faculty assigned to the course, excluding clinical education—e.g., if 2 faculty teach a 3-credit course (1 lecture, 2 lab credits) with 75 contact hrs, the total assigned hours would be 150 hrs for this course.
percentage breakdown of effort. Over the time period of 2006 to 2009 there was an addition of 1 FTE to the PT faculty. This additional faculty effort was primarily allocated to vice chair responsibilities as evidenced in Table 1 by the increase in administration allocation between 2006 and 2009.

Once the teaching workload metric was established and approved by the administration and faculty, the department chair worked with individual faculty to determine their overall workload for each calendar year. The department established a culture that continued to value the high importance and need for teaching, while consciously making efforts to expand research and clinical service. The program made a decision with support from the faculty to assign smaller teaching workloads to faculty who had the greatest interest and potential for externally funded research. Consequently, the department began to designate faculty based on their primary assignments of effort, while upholding the expectation that all faculty conduct a portion of their time to scholarly work.

The following example illustrates the percentage effort breakdown for a research and teaching faculty:

- Teaching faculty: 75% teaching (18 credit hours/year), 15% research and 10% service
- Research faculty: 25% teaching (6 credit hours/year), 65% research and 10% service

An additional research metric was established to manage the faculty release time from teaching and assess research effectiveness. This metric was designed to quantify an individual’s effort directed at obtaining research funding. Composite research efforts are presented in Table 1. Use of the research metric was intended primarily for faculty with a research appointment of 25% or more, and those who had received start-up packages for establishing a research program, although it was applied to other faculty as well. Funding applications were classified with consideration to the effort required for preparation of proposal, whether budgets provided investigator’s salary, fringe and institutional facilities and administration, and the total award amount. This metric was used in the faculty development plans to establish and evaluate research efforts of the individual faculty.

Departmental Growth/Outcomes

Following the development of the workload guidelines, the department revised the instructional methods associated with problem based learning and adopted a less faculty intensive case-based curricular model. The costs associated with the PBL model, including the need to pay external tutors was becoming increasingly prohibitive in addition to the high contact hour demands on the existing faculty. The new curricular model was initiated in the fall of 2002. The result of this change was a decrease in total assigned contact hours for the curriculum from 5681 hours in the PBL model to 2474 hours in the case-based model per calendar year. Table 2 compares the contact hours for each curriculum model (PBL, case-based master’s level curricula as well as the doctoral curriculum). Table 2 also includes the total number of students in each of the curricular models as well as total student credit hours. The immediate effect on faculty by changing the curricular model from PBL to case-based was a reduction in total assigned contact hours from approximately 500 hours to between 90 and 300 hours/faculty/year.

Faculty teaching loads were leveraged to expand research opportunities within the program. Between 2002 and 2009 there was an increase in the total number of FTE’s dedicated to research as well as an increase in overall faculty scholarship. For example, the research FTE was 1.90 in 2002 and this increased to 3.25 in 2009. The major shift in the research commitment and outcomes was through the redistribution of workload and faculty effort secondary to decreased teaching requirements. In anticipation of the planned research growth, the college/institution provided significant assistance in terms of dedicated research space and equipment, travel, and support personnel. Refer to Table 3 to compare growth of faculty research productivity for the time period 2002 to 2009.

Following the implementation of the workload guidelines and subsequent faculty effort redistribution, the amount of faculty clinical practice also increased. This outcome is measured in terms of total income earned by physical therapy faculty per year and is captured for the time period 2002 through 2009 in Table 4. We believe this increase can be attributed to the additional time available for service activities following the redistribution of effort. Faculty practice could then become a priority given this time allocation, despite the fact that the total composite service FTE did not change during this period of time.

Throughout this period of research and service growth, the department continued to meet its primary mission of preparing reflective PT practitioners to meet the health care needs of the state of Georgia. Supporting evidence includes program student retention rates well above the national average (97% and 89% respectively). In addition, the department achieved
improvement in first time pass rates for program graduates on the national PT licensing exam. Average 3-year first-time pass rates for this exam improved from 76% (2000-2002) to 97% (2008-2010). In 2009 the physical therapy program was reaffirmed for full accreditation by the Commission on Accreditation in Physical Therapy Education through the year 2019.

Faculty Development

The department emphasized faculty and staff development during this same time period to coincide with implementation of the workload model. Faculty and staff had many opportunities for professional growth. Supporting individual faculty members in their pursuit of excellence in either teaching or research impacts their success in those areas. Eight faculty completed post professional doctorates and three staff completed baccalaureate degrees. Support from the department and institution included educational funds and release time. The department, college and institution provided formal and informal professional development programs, research consultation services and intramural funding. During this period three faculty were promoted and one received tenure. Three additional faculty were awarded promotion and tenure in 2011.

Sustainability of the Workload Structure

The sustainability of the workload structure was further tested between 2002 and 2009 as the department engaged in several activities beyond the typical education, research and service missions. Each activity required significant faculty effort. One such initiative was the creation, planning and implementation of the new DPT curriculum, the first clinical doctorate degree in the CAHS. The DPT curriculum was the result of a continuous process of evaluation and development that began in the spring 2002, with the first class admitted in 2005 and graduated in 2008. The transition to the DPT required a small increase in the curriculum contact hours assigned to faculty (2474 to 2718) as the overall curriculum was lengthened to 127 total credits. The introduction of the DPT program also increased total enrollment from 88 to 108 students.

During this timeframe, the department also planned and coordinated the move of the program to the new Health Sciences Building, which required significant time and effort expenditures by the faculty. Through the move to the new building, the department acquired an additional 7000 sq feet of dedicated space including state of the art research and student labs. Finally, during this time period the department and institution administrators, as well as the faculty, had the additional responsibility of leading a multi-institutional initiative to create a Doctor of Physical Therapy Consortium with two other state institutions.

Discussion

Faculty workload is one of the many issues that contribute to a quality education while also affecting faculty morale, retention, productivity and tenure. Establishing a faculty workload model can assist administrators in making course assignments and determining minimum numbers of FTEs for teaching to provide adequate time for research, service or clinical practice. Although many factors affect faculty productivity, our data demonstrates how we were able to increase research productivity and service after implementing a faculty workload model, while continuing to support the educational growth and success of our program.

The teaching workload we established is consistent with the AAUP statement on faculty workload, which set forth recommendations for maximum teaching loads for graduate levels. In addition the departmental workload data is consistent with other physical therapist educational programs allocations of workload. We believe our findings are generalizable to other allied health programs using a similar approach. However, specific factors that consume faculty time need to be considered to equitably and accurately make assignments or infer productivity. The work intensity of different types of teaching contact time is a complex variable that requires careful consideration and tailoring to the particular educational setting.

We believe the decrease in teaching responsibilities resulting from the implementation of the workload guidelines enabled faculty to spend more time pursuing scholarship and clinical practice to meet the multiple missions of the program and institution. In addition to the increase in time, we believe there were several other factors contributing to growth in research and clinical practice. Faculty annual development plans were established with specific goals emphasizing scholarship and practice. Institutional support of departmental research was provided via equipment and space dedicated to driving simulation, motion analysis, environmental physiology and cardiovascular labs. These state of the art resources significantly supported the PT faculty’s ability to generate high-quality research. Additional funds were provided for travel and support personnel to be shared by the research faculty. The creation of the MCG Allied Health Sciences Practice Group, Inc. assisted in finding clinical practice opportunities and negotiating contracts for physical therapy faculty. The increase in clinical practice may ultimately provide opportunities for expanded faculty and student research as well as faculty supervised clinical education.

Table 4. PT Faculty Practice Revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Faculty Generated Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$3,207</td>
</tr>
<tr>
<td>2003</td>
<td>$4,783</td>
</tr>
<tr>
<td>2006</td>
<td>$6,289</td>
</tr>
<tr>
<td>2009</td>
<td>$15,450</td>
</tr>
</tbody>
</table>
Heavy teaching workloads can limit faculty opportunities for scholarship and service. This case demonstrates how our PT program within a research university and academic health center was able to use a workload model to reduce faculty teaching loads. The result was an increase in scholarly and clinical productivity and continuation of a high quality professional curriculum. The workload guidelines have enabled the collective core faculty to be active in all aspects of the teaching, research/scholarship and service missions, meeting the needs and expectations of the department, college and institution. We believe the implementation of the workload guidelines have facilitated faculty development and retained faculty who are on track for promotion and tenure.

REFERENCES

2. Allen HL. Faculty workload and productivity in the 1990s: preliminary findings. NEA 1996 Almanac of Higher Education. 1996;21-34.

Date published: July 31, 2011.
Revised: —