Promotion and Tenure Perceptions of University Aviation Association (UAA) Collegiate Aviation Administrators and Faculty

Samuel R. Pavel, John T. Legier Jr. and Jose R. Ruiz

Southern Illinois University Carbondale

Authors' Note:

Samuel R. Pavel, Department of Aviation Management and Flight, Southern Illinois University Carbondale; John T. Legier Jr., Technical Resource Management, Southern Illinois University Carbondale; Jose R. Ruiz, Department of Aviation Management and Flight, Southern Illinois University Carbondale. Correspondence pertaining to this article may be addressed to Dr. Samuel Pavel, Department of Aviation Management and Flight MC6623, Southern Illinois University Carbondale, Carbondale, IL 62901; phone: 618.453.7269 email: spavel@aviation.siu.edu

Abstract

The promotion and tenure process is often viewed as one of the most highly scrutinized and demanding periods in a faculty member's career. This study reports collegiate aviation administration and faculty perceptions toward promotion and tenure workload components; including, the importance, or value of specific workload components considered during the promotion and tenure process for probationary faculty members. The study made use of an online survey. The online survey instrument was composed of 20 multiple-choice questions with space for additional comments. Two-hundred-twenty professional members of the University Aviation Association (UAA) formed the study population. Eighty-seven responded for a response rate of 39.5%. The results of this quantitative/descriptive research study re-affirm the notion that perceptions of workload items used to determine fitness for promotion and tenure are not uniform throughout collegiate aviation. One perception reported as a constant was the belief that all "three pillars," scholarship, teaching and service possessed some degree of importance in the promotion and tenure process. A future research study comparing the perceptions of administrators versus that of faculty on the topic of promotion and tenure should be explored.

Introduction

The intent of this study was to report the collective perceptions of collegiate aviation faculty and administrators regarding the importance, or value of specific faculty workload components typically considered in the promotion and tenure process for probationary faculty members. The promotion and tenure process is often viewed as one of the most highly scrutinized and demanding periods in a faculty member's career. "The tenure and promotion process may be the most challenging and frightening time in a faculty member's life" (Gelmon & Agre-Kippenhan, 2002, p. 7). However, policies used to communicate suitability for promotion and tenure can be highly subjective and often vary

among different institutions. For example, listed below are promotion and tenure policy excerpts from four different collegiate aviation institutions. Promotion guidelines employed by the Provost of Purdue University (2011) state:

The tasks of University faculty members are to acquire, discover, appraise and disseminate knowledge. They should communicate this knowledge and the manner of its acquisition or discovery to their immediate community of students and scholars, to their profession, and to society at large. Service to the institution, the community, the state, the nation and the world constitutes an important mission of University faculty members. As an institution of higher education with a commitment to excellence and a diversity of missions, Purdue University values creative endeavor, research, and scholarship; teaching and learning in its many forms; and engagement in its many forms, including extension and outreach for example. To be considered for promotion, a faculty member should have demonstrated excellence and scholarly productivity in at least one of these areas: discovery, learning and engagement. Ordinarily, strength should be manifest in more than one of these areas (para. 2).

Embry-Riddle Aeronautical University (2010) stated:

Consideration for promotion and tenure of faculty will recognize the importance of teaching, service, and scholarship, viewed as a continuum of activity over time. Therefore, our colleges will develop and administer multiple pathways to tenure and promotion reflecting different combinations of teaching, research, and service (p. 8).

Further, The Ohio State University (2011) stated:

The awarding of tenure and promotion to the rank of associate professor must be based on convincing evidence that the faculty member has achieved excellence as a teacher, as a scholar, and as one who provides effective service; and can be expected to continue a program of high quality teaching, scholarship, and service relevant to the mission of the academic unit(s) to which the faculty member is assigned and to the university. Promotion to the rank of professor must be based on convincing evidence that the faculty member has a sustained record of excellence in teaching; has produced a significant body of scholarship that is recognized nationally or internationally; and has demonstrated leadership in service (para. 5).

Additionally, Southern Illinois University (SIUC, 1996) stated:

...therefore, it is essential that its faculty be dedicated to achieving

excellence in teaching, research/creative activity, and professional contributions to preserve and strengthen the vitality of the university. Academic promotion is awarded to those faculty making continuing contributions in these areas. The preservation of quality requires that all persons recommended for promotion clearly satisfy the general criteria presented herein. Fairness requires that these criteria be applied as uniformly as possible (p. 1).

One common theme appears to emerge among the mentioned policies; teaching, scholarship and service play an important role in the promotion and tenure process.

Teaching, Scholarship and Service Defined

The literature review uncovered a number of varied definitions, used by different academic institutions, for the terms: teaching, scholarship and service. It would appear that universal definitions for teaching, scholarship and service do not exist. However, definitions used by the University of North Carolina Greensboro (UNCG, 2009) employed a large number of terms and activities used in definitions common throughout the literature review and were adopted for the purposes of this study.

Teaching. "Teaching embraces activities related to instruction and learning that occur both inside and outside the classroom, including community-engaged teaching, international experiences, and other diverse modalities and settings" (UNCG, 2009, p. 3).

Scholarship. "Research and creative activities include all forms of discovery and integration of knowledge; the solution of practical problems; critical analyses; the organization, creation, analysis and dissemination of knowledge resources" (UNCG, 2009, p. 3).

Service. Lastly, the service component was defined by UNCG (2009) as such:

Service embraces activities that sustain the University and enable it to carry out its mission, contributes to the function and effectiveness of the faculty member's profession and discipline, and reaches out to external communities and constituencies, such as government agencies, business, private for-profit and not-for-profit organizations, and arts communities, where academic knowledge intersects with practical affairs and problem solving (p. 3).

Problem Statement

How are specific faculty workload components perceived and valued by collegiate aviation administrators and faculty during the promotion and tenure process? The promotion and tenure process can be difficult to negotiate (Gelmon & Agre-Kippenhan, 2002). Exploring the manner in which collegiate aviation administrators and faculty weigh the importance and/or value of specific workload components during the promotion and tenure process may aid tenure-track faculty in its successful completion.

Purpose Statement

The purpose of this quantitative/descriptive study was to report the collective perceptions of collegiate aviation faculty and administrators regarding the importance, or value of specific faculty workload components typically considered in the promotion and tenure process.

Research Questions

- 1. How do collegiate aviation faculty and administrators perceive the importance of teaching, scholarship and service in determining an individual's fitness for promotion and tenure?
- 2. How do collegiate aviation faculty and administrators perceive the value of specific scholarly activities toward successfully completing the promotion and tenure process?

This article will address these and other issues associated with the promotion and tenure process within collegiate aviation.

Literature Review

"[T]enure and promotion decisions are critical to young professionals seeking their first faculty position, continuing faculty members contemplating alternative positions, and students seeking particular emphases in their graduate educations. These criteria (*scholarship, teaching, and service*) define the uniqueness of faculty work...." (Green, 2008, p. 117), thus emphasizing the significance for clarifying these measures in the academic promotion and tenure process.

Examining the Roots of the Tenure and Promotion Process

In 1940, the American Association of University Professors (AAUP) in collaboration with the Association of American Colleges (*now, the Association of American Colleges and Universities*) developed a joint statement of principles with reference to the previous year's academia conference information, which is now known as the *1940 Statement of Principles on Academic Freedom and Tenure* (AAUP, 2006). Further specific revisions to the "statement" were completed in 1990.

Particular to the requirements of tenure, the AAUP *Statement of Principles on Academic Freedom and Tenure* stipulates that:

After the expiration of a probationary period, teachers or investigators should have permanent or continuous tenure, and their service should be terminated only for adequate cause...Frequently, young faculty members have had no training or experience in teaching, and their first major research endeavor may still be uncompleted at the time they start their careers as college teachers. Under these circumstances, it is particularly important that there be a probationary period - a maximum of seven years under the *1940 Statement of Principles on Academic Freedom and Tenure* - before tenure is granted. Such a period gives probationary faculty members time to prove themselves, and their colleagues time to observe and evaluate them on the basis of their performance in the position rather than on the basis only of their education, training, and recommendations (p. 16).

In 1990, Boyer published *Scholarship reconsidered: Priorities of the professoriate*. His approach to redefining the status-quo in measuring promotion and tenure through the traditional merits of scholarship, teaching, and service has gained support as well as raised questions in trying to further define the specific criteria for a new promotion and tenure process. Boyer's (1990) expansion of the definitions of "scholarship" included: a) scholarship of discovery, b) scholarship of integration, c) scholarship of application, and d) the scholarship of teaching.

Boyer further provided six measures/standards related to this new definition of scholarship. A summary of these standards were reported by Glassick's (2000) review below:

- Clear goals: does the scholar state basic objectives, define the objectives as achievable and realistic, and does the scholar identify important questions for the field?
- Adequate preparation: does the scholar have the understanding, resources, and skills necessary to move an assignment forward?
- Appropriate methods: does the scholar apply effective methods or modify those methods to achieve appropriate goals?
- Significant results: does the scholar's work open avenues for additional research or add to the field of research by obtaining goals in their research?
- Effective presentation: does the scholar effectively and with clarity and integrity, present their own work?
- Reflective critique: does the scholar use appropriate methods to critically evaluate and improve on their own work? (p. 879).

Of all the expanded definitions of scholarship provided by Boyer (1990), the definition of *scholarship of teaching* has been difficult for faculty to distinguish between

effective teachings vs. the scholarship of teaching. Glassick (1999) further stated that the former president of the Carnegie Foundation, Lee Shulman, provided the following criteria in order to clarify what scholarship of teaching should include: "a) the work must be made public, b) the work must be available for peer review and critique according to accepted standards, and c) the work must be able to be reproduced and built on by other scholars" (p. 879).

Perceptions of the Workload Components in the Promotion and Tenure Process

In 1997, Emmert and Rollman performed a national study on tenure and promotion standards within the discipline of Communication Arts and Sciences. This study surveyed 169 departments across a variety and range of academic institutions. The initial purpose of this survey was to determine the weighting of scholarship, teaching, service, and evaluation of activities in the tenure and promotion process; secondly, the author's hoped the results of this study would also lead to providing a baseline for faculty planning and assisting administrators in the development of standards for the tenure and promotion process. Responses to workload requirements were based on an academic year.

The results of the study found that teaching loads differed among institutions based on the level of degree offered and ranking of the faculty member. For institutions that only offered bachelor's degrees, departments required faculty members to teach an average of 6.89 courses per academic year. Those with master's programs required faculty to teach an average of 6.41 courses and doctorate programs 5.10 courses per academic year, respectively. Additionally, when evaluating percent time assigned to teaching, scholarship, and service, the authors found that for bachelor degree programs, faculty time assigned to teaching varied from 62-64%, scholarship ranged from 20-22%, and time assigned to service varied between 15-17%. For those institutions responding with master's programs, faculty time assigned to teaching ranged from 52-57%, scholarship 29-31%, and service 15-18%. Further, for responding doctorate degree granting institutions, faculty time assigned to teach varied between 41-43%, scholarship 40-45%, and service 12-18% (Emmert & Rollman, 1997).

Additionally, the study provided a Likert-type scale for rating the importance of activities related to teaching, scholarship, and service. Results for teaching identified the activities that would most likely add credit to the promotion and tenure process include: a) positive teaching evaluations from students and/or peers, b) curriculum development, and c) supervising independent projects or student internships. Activities identified in the scholarship category included: a) publishing articles in regional and national journals, b) serving as an editor or editorial board member on a regional or national journal, c) publishing books, and d) presenting papers at a regional or national conference. Service activities ranked from this study include: a) regularly serving and/or chairing department, college and/or university committees, b) development of on-campus programs that

contribute to the enrichment of the department, college, or university, and c) holding office in regional and national organizations.

The authors conclude that based on the results of this study, scholarship, in the form ofpublications and presentations is a significant part of the promotion and tenure process for every faculty member. Another conclusion drawn from this study identified "those department expectations for scholarly output and service activities comparative to teaching loads were not adjusted as much as they should have been. A MANOVA showed no significant effect of teaching load on the expectations for publications, presentations, or service. The author's additionally conducted a one-way analysis of variance in which differences in teaching load showed significance between degree programs, suggesting that teaching load may have contributed to the result on scholarship expectations detected in the MANOVA" (Emmert & Rollman, 1997, p. 16).

In 2007, the Modern Language Association of America (MLA) performed an extensive review of literature covering the evaluation and measure of scholarship under the tenure and promotion process. This study identified 20 recommendations under their charter pertaining to scholarship and the promotion and tenure process. Although most recommendations from this review are discipline specific to the MLA profession, a number of their recommendations apply across all academic professions. A portion of the recommendations include that:

- departments and institutions should practice and promote transparency throughout the tenuring process.
- departments and institutions should calibrate expectations for achieving tenure and promotion with institutional values, mission, and practice.
- departments and institutions should recognize the legitimacy of scholarship produced in new media, whether by individuals or in collaboration, and create procedures for evaluating these forms of scholarship.
- departments should devise a letter of understanding that makes the expectations for new faculty members explicit. The letter should state what previous scholarship will count toward tenure and how evaluation of joint appointments will take place between departments or programs.
- departments and institutions should provide support commensurate with expectations for achieving tenure and promotion (start-up funds, subventions, research leaves, and so forth).
- departments and institutions should establish mentoring structures that provide guidance to new faculty members on scholarship and on the optimal balance of publication, teaching, and service.
- scholarship, teaching, and service should be the three criteria for tenure. Those responsible for tenure reviews should not include "collegiality" as an additional criterion for tenure (MLA, 2007, pp. 63-64).

In support of the last recommendation point provided from this study, the authors state: "the task force agrees with AUUP's argument on faculty evaluations during the tenure process; in that a 'fourth' criterion of inclusion of collegiality, beyond scholarship, teaching and service should not be invoked" (p. 52).

Method

Population

The population for this study was composed of the 232 "professional members" listed on the August, 2010 University Aviation Association (UAA) online Membership Directory (UAA, 2010). The UAA is a professional organization representing the interests of collegiate aviation. UAA membership is composed of 105 collegiate aviation institutions and over 525 individual members (UAA, 2011). Twelve e-mail messages were returned as undeliverable, or the e-mail addresses were invalid. Two-hundredtwenty professional members with valid e-mail addresses were identified as the sample in this study.

Online Survey Instrument

The literature review did not reveal a survey instrument specific to the perceptions of promotion and tenure issues in a collegiate aviation environment. As such, another survey questionnaire addressing perceptions within collegiate aviation developed by Ruiz (2009) was used as a general guide. The study made use of an online survey questionnaire. The online survey instrument was composed of 20 multiple-choice questions with space for additional comments.

A survey validation panel composed of 15 collegiate aviation administrators and tenured/tenure-track faculty members participated in a pilot study used to provide suggestions for improving the construct, accuracy and clarity of the survey questionnaire. The survey instrument was also approved by the Southern Illinois University Carbondale (SIUC) Human Subjects Committee. A copy of the final draft of the survey used in this study can be found in the appendix.

Data Collection

Two-hundred-twenty UAA professional members with valid e-mail addresses were contacted via e-mail and invited to participate in the research study. The survey data collection period spanned six months. Two survey reminder e-mail messages were sent in three-month intervals to all 220 study participants. Eighty-seven complete, useable survey responses were used to gather research data. The survey response rate was 39.5%. Given the size of the population, a 39.5% response rate allows for a 95% degree of certainty (with a \pm 10% margin of error) that responses are accurately representing the population (GreatBrook, 2007).

Data Analysis

Quantitative descriptive research methods were used to analyze and report data collected in this study. "*Quantitative descriptive research* uses quantitative methods to describe *what is*, describing, recording, analyzing, and interpreting conditions that exist" (Best & Kahn, 1993, p. 26). Means, frequencies and standard deviations were calculated and used to analyze aggregate data.

Results

Demographics

The survey respondents represent a cross-section of 4-year collegiate aviation institutions and faculty. Seventy-eight of the survey respondents were faculty members of all ranks (assistant, associate, and full), and twenty-two percent of the survey respondents were in an administrative position such as a department chairperson or similar position. The faculty rank of the chairpersons was not identified in the survey. Sixty percent of the survey respondents were tenured at their institution.

Only survey respondents from 4-year institutions are included in this report. Eightyfour percent of the survey institutions have a graduate program. Over one-third of the institutions (39%) were doctoral granting with a Carnegie Foundation classification as "high" or "very high" research activity. Eighteen percent were doctorate/research universities. Approximately, one quarter of the institutions (27%) were non-research intensive and 16% of the respondents did not know their institution's Carnegie Foundation classification.

Survey responses were grouped in five categories based on the number of students in the institution of the survey respondents, and then an aggregate of all responses. The groupings are: Less than 10,000; Between 10,000 and 20,000; Between 20,000 and 30,000; Between 30,000 and 40,000; Greater than 40,000. Slightly less than one-half survey respondents are at institutions that have student populations of 20,000 or less. One-fifth of the survey respondents are at institutions that have more than 30,000 students. The largest group of survey respondents were from institutions with less than 10,000 students or between 30,000 and 40,000 students, each representing 29% of the total.

Scholarship, Teaching, Service

Survey respondents were asked to rank their perceived value of the three pillars of promotion and tenure – Scholarship, Teaching, Service – on the following scale: Not Important = 1; Minimally Important = 2; Somewhat Important = 3; Important = 4; Very Important = 5.

When it comes to the perception of scholarship and teaching - size matters. Scholarship is perceived as the most important pillar in institutions greater than 30,000 students, while teaching is perceived as the most valuable pillar in institutions with less than 10,000 students. Service is perceived as the least important of the three pillars in all groups (see Table 1). The next several sections break down each pillar in more detail based on *size of institution* (number of students reported/enrolled/attending).

Scholarship. Each institutional size group had responses rating scholarship as "Very Important." However, *every* survey respondent from institutions with greater than 40,000 students rated scholarship as "Very Important." In the Between 30,000 and 40,000 groups, *no* survey respondent rated scholarship less than "Somewhat Important," and 80% rated scholarship as "Very Important." The average rating for scholarship by the two groups was 5.00 and 4.70 respectively.

Less than 25% of the survey respondents from institutions with less than 10,000 students rated scholarship as "Very Important." The average rating was 3.36. The average rating for the Between 10,000 to 20,000 groups increased significantly to 4.53, but still lower than the average of the largest groups.

	Scholarship	Teaching	Service
Size of Institution by Enrollment	M (SD)	M (SD)	M (SD)
Less than 10,000	3.36 (1.32)	4.44 (1.23)	3.68 (1.14)
Between 10,000 and less than 20,000	4.53 (1.07)	3.88 (1.41)	2.88 (1.11)
Between 20,000 and less than 30,000	4.36 (0.99)	4.48 (0.82)	3.44 (1.16)
Between 30,000 and less than 40,000	4.70 (0.67)	3.60 (0.84)	2.80 (0.63)
Greater than 40,000	5.00 (0.00)	4.00 (1.41)	3.44 (1.51)
All Responses	4.18 (1.19)	4.22 (1.16)	3.33 (1.17)

 Table 1. Perceived Importance of the Three Standard Pillars of Promotion and tenure

When asked if scholarship is a critical gauge in determining an individual's fitness for promotion and tenure 61% of the survey respondents either agreed or strongly agreed. However, 26% of survey respondents disagreed or strongly disagreed. Survey respondents from the smaller institutions had a higher percentage of disagree and strongly disagree responses (see Table 2).

	Strongly Agree	Agree	Disagree	Strongly Disagree	Neither
Size of Institution by Enrollment					
Less than 10,000	3	8	4	2	8
Between 10,000 and less than 20,000	5	6	6	0	0
Between 20,000 and less than 30,000	4	10	4	5	2
Between 30,000 and less than 40,000	3	5	1	0	1
Greater than 40,000	3	4	1	0	0
All Responses	19	34	16	7	11

Table 2. Scholarship is a Critical Gauge in Determining an Individual's Fitness for Promotion and tenure

The perceived value of each scholarly activity in each size category was fairly uniform throughout size groupings. The highest ranked scholarly activity was a peer-reviewed journal article with an average ranking of 4.60. Publishing a book was ranked second highest with an average ranking of 4.55. The only other scholarly activity that was ranked above "Valued" was an externally funded grant with an average ranking of 4.41. Publishing a chapter in a book was ranked slightly below "Valued," however only two of the five groups ranked it above 4.0 and then by only a small amount.

Survey respondents were asked to assign a value to a variety of scholarly activities using the following scale: Not valuable = 1; Very Little Value = 2; Somewhat of Value = 3; Valued = 4; Most Valued = 5. Peer-reviewed abstract, conference proceedings, etc. (M = 3.61), conference/professional presentation (M = 3.54), member of peer-reviewed journal panel (M = 3.45), and internally funded grant (M = 3.34) were all ranked in the middle of "Somewhat of Value" and "Valued" (3.00 and 4.00). The lowest ranked scholarly activities were consultantship (M = 2.73), research posters (M = 2.68), book

review (M = 2.62), non-peer reviewed abstract, conference proceedings, etc. (M = 2.54), and non-peer reviewed journal article (M = 2.45). All were ranked lower than "Somewhat of Value" (3.00).

Publication Venues. Survey respondents were asked to rank specific publication venues using the following scale: Not Valuable = 1; Very Little Value = 2; Somewhat of Value = 3; Valued = 4; Most Valued = 5.

There were four publication venues that had an average ranking in every size group of greater than "Valued" (4.0). The highest ranked publication venue was the *Collegiate Aviation Review* (CAR) with an average ranking of 4.36, although the survey respondents from the largest institutions preferred the *Journal of Aviation/Aerospace Education and Research* (JAAER), the *International Journal of Applied Aviation Studies* (IJAAS), and the *Journal of Air Transportation* (JAT). The *Journal of Aviation Management and Education* (JAME) was the only other publishing venue with an average ranking of 4.0 or greater from all size groups. The *International Journal of Professional Aviation Training and Testing Research* (IJPATTR) had one size group rank it below 4.0, but the journal's overall average ranking was 4.14.

Three publication venues had an average ranking below 4.0, but greater than 3.00. The *International Journal of Safety Across High-Consequence Industries* had two size groups give it an average ranking about 4.0, but the overall average ranking was 3.81. The *Academic and Business Research Institution* (AABRI) and the *American Technical Education Association* (ATEA) were ranked below 3.0 by the Greater than 40,000 group; however their overall average ranking was 3.40 and 3.35 respectively.

The lowest ranked publication venues were an aviation trade magazine article and a non-peer reviewed journal publication with average rankings of below 3.0. Their rankings were 2.85 and 2.45 respectively.

Single versus multi-authored publications. Less than 50% of survey respondents indicated that a single-author publication is more valuable for achieving promotion and tenure than a multi-author publication; although 41% of the survey respondents indicated that single and multi-author publication are weighted equally in the promotion and tenure decision.

In the case of a multi-author publication 60% of the survey respondents agreed that being identified as the first author is more valuable in the promotion and tenure process.

When a publication is multi-authored, over 60% of the survey respondents indicated that the authors do not need to identify what percentage each author contributed to the publication. Less than 20% of the survey respondents said that identifying the contribution percentage was required.

Geographical location of a scholarly venue. Survey respondents were asked to rank the geographical location of a scholarly venue using the following scale: Not Valuable = 1; Very Little Value = 2; Somewhat of Value = 3; Valued = 4; Most Valued = 5.

There is agreement between all size classes that scholarship activity in the National and International arena is the most important geographical venue toward successfully achieving promotion and tenure. The overall average ranking for each venue was greater than "Valued" (4.0) with average rankings of 4.41 and 4.32 respectively. The Regional venue average ranking was slightly lower than "Valued" (M = 3.82). The least valuable venue from scholarship activity was the local venue, with an average ranking of 3.06. However, the survey respondents from smaller institutions placed a higher value on the local venue than did survey respondents from larger institutions. Survey respondents from institutions of less than 30,000 students ranked the local venue, on average, about 3.00, or "Somewhat of Value." While survey respondents from institutions greater than 30,000 students ranked the local venue, "Very Little Value" and "Somewhat of Value."

Teaching. The perception of the importance of teaching to the promotion and tenure process was the inverse of the perception of scholarship, although the difference in averages was less. Smaller schools perceived teaching as more important than did the larger schools. Over 75% of the survey respondents from institutions with less than 10,000 students rated teaching as "Very Important." The average rating for this group was 4.44. Only 27% of the survey respondents from the largest institutions rated teaching as "Very Important." The group that valued teaching the most was the survey respondents from institutions with between 20,000 and 30,000 students, with an average of rating 4.48.

Most institutions base teaching evaluation either wholly or in-part on an evaluation of classroom instruction (Phillips, 1997). Student evaluation is the most common method of evaluating classroom instruction. Ninety percent of the survey respondents listed that classroom instruction is evaluated by students. Classroom instruction evaluated by other faculty members or peers was listed in slightly over half of the survey responses. Evaluation performed by Chairpersons of the department/program was indicated as the least common method of classroom instruction evaluation.

Although most of the evaluation of teaching ability was based on classroom instruction evaluation, the perception of the fairness and accuracy of the evaluation is questioned. Of the survey responses either agreeing or disagreeing that the statement that the methods of evaluation classroom instruction at their institution are fair and accurate, 41% of the survey respondents either agreed or strongly agreed and 41% disagreed or strongly disagreed. Regardless of the perceived fairness and accuracy of the classroom evaluation methods, and thus the evaluation of teaching, 86% of the survey respondents agreed or strongly agreed with the statement that teaching performance is a critical gauge in determining an individual's fitness for promotion and tenure (see Table 3).

Service. The perception of service to promotion and tenure was the lowest rated pillar in all size groupings. Overall service was only rated as "Somewhat Important" with a M = 3.33. Even with the low ranking service was still perceived as critical in the promotion and tenure process (see Table 1 above).

The survey differentiated service into three areas: Professional, University/Institutional, and Community. Professional service was perceived as critical for promotion and tenure by 68% of the survey respondents. Only 11% of the survey respondents disagreed or strongly disagreed with the statement that professional service is a critical gauge in determining an individual's fitness for promotion and tenure (see Table 4).

The perception of university/institutional service is also perceived as critical for promotion and tenure, but not quite as strong as professional service. Sixty-five percent of those who responded to this element indicated that university/institutional service was critical. Seventeen percent either disagreed or strongly disagreed with the statement that university/institutional service is a critical gauge in determining an individual's fitness for promotion and tenure.

Community service was perceived as the least valuable type of service for promotion and tenure. Forty-three percent of those who responded to this element either agreed or strongly agreed with the statement that community service is a critical gauge in

	Strongly Agree	Agree	Disagree	Strongly Disagree	Neither
Size of Institution by Enrollment					
Less than 10,000	14	9	0	1	0
10,000 to less than 20,000	10	6	0	1	0
20,000 to less than 30,000	12	9	1	2	1
30,000 to less than 40,000	4	5	0	0	1
Greater than 40,000	1	4	1	1	1
All Responses	42	33	2	5	3

 Table 3. Teaching Performance is a Critical Gauge in Determining an Individual's

 Fitness for Promotion and tenure

determining an individual's fitness for promotion and tenure. Thirty-one percent disagreed or strongly disagreed with the statement.

Annual promotion and tenure progress and/or review

The final element of the survey asked respondents if annual promotion and tenure progress and/or reports were done at their institutions. Most survey respondents who responded to this element, 66%, indicated that their institutions did an annual evaluation of probationary (tenure track) faculty. However, 26% of those who responded to this element said their institution did not evaluate probationary faculty.

Discussion

Respondents indicated that Teaching (M = 4.22) was slightly more "important" than Scholarship (M = 4.18) toward successfully achieving promotion and tenure at their institution. Respondents also reported that Service was viewed as "somewhat important" (M = 3.33) in the pursuit of promotion and tenure. Additional results will be discussed by category in the following three sections: Scholarship, Teaching and Service.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Neither
Size of Institution by Enrollment					
Less than 10,000	3	17	1	2	2
10,000 to less than 20,000	2	10	2	0	3
20,000 to less than 30,000	1	14	3	1	6
30,000 to less than 40,000	0	7	0	0	3
Greater than 40,000	2	1	1	0	4
All Responses	8	51	7	3	18

Table 4. *Professional Service is a Critical Gauge in Determining an Individual's Fitness for Promotion and tenure*

Scholarship

Scholarship was viewed as an important component toward successfully achieving promotion and tenure. However, it was viewed as "important" (M = 4.64) among larger institutions (greater than 10,000), and appears to carry less weight among smaller institutions (M = 3.36).

In many cases, scholarship was considered a critical gauge in determining an individual's fitness for promotion and tenure. Sixty-one percent of respondents "strongly agreed" (22%) or "agreed" (39%) with the statement, "Scholarship is a critical gauge in determining an individual's fitness for promotion and tenure." Twenty-six percent of respondents "strongly disagreed" (8%) or "disagreed" (18%) with the statement. Thirteen percent of respondents were neutral on the topic.

All scholarly activities were viewed as possessing some level of value. However, three scholarship activities were viewed as having greater "value" toward successfully achieving promotion and tenure requirements: a "Peer-Reviewed Journal Article" (M = 4.60), "Publishing a Book" (M = 4.55) and an "Externally Funded Grant" (M = 4.41). Other research activities were viewed as having "very little value" or being "somewhat of value".

All mentioned publishing venues were perceived as possessing some level of value. However, six publications were identified as having the most "value" toward successfully achieving promotion and tenure requirements: *Collegiate Aviation Review* (CAR) (M =4.36), *Journal of Aviation/Aerospace Education and Research* (JAAER) (M = 4.33), *International Journal of Applied Aviation Studies* (IJAAS) (M = 4.32), *Journal of Air Transportation* (JAT) (M = 4.31), *Journal of Aviation Management and Education* (JAME) (M = 4.20) and *International Journal of Professional Aviation Training and Testing Research* (IJPATTR) (M = 4.14).

Based on the data, a definitive conclusion regarding the value of a single-author publication versus a multi-author publication in achieving promotion and tenure could not be determined. Slightly less than 50% of respondents considered a single-author publication more valuable than a multi-author publication. Eight percent of respondents did not believe that was the case; 41% of respondents felt that single-author and multi-author publications were weighed equally and 1% of respondents indicated that they did not know.

Being identified as first author in a multi-author publication was considered more valuable than other authorships toward achieving promotion and tenure. Sixty percent of respondents believed that being identified as the first author in a multi-author publication was more valuable than other authorships. Thirteen percent of respondents did not agree with that view; 22% of respondents felt that all authorships in a multi-author publication possessed equal value. Five percent of respondents indicated that they did not know.

Respondents indicated that they were not required to report percentages of effort/contribution made in the development of a multi-author publication. Sixty-two percent of respondents indicated that they were not required to report percentages of effort/contribution made in the development of a multi-author publication. Twenty percent of respondents indicated that authors in a multi-author publication were required to report percentages of individual effort/contribution; and 18% reported that they did not know.

All geographical venues are viewed as possessing some level of value toward successfully achieving promotion and tenure. However, respondents indicated that a scholarship activity conducted in a National (M= 4.41) or International (M= 4.32) venue had greater value in achieving promotion and tenure. Regional (M= 3.82), state (M= 3.51), and local (M= 3.06) venues were perceived as being "somewhat of value."

Teaching

The majority of respondents viewed Teaching as a critical gauge in determining an individual's fitness for promotion and tenure. Eighty-eight percent of respondents "strongly agreed" (49%) or "agreed" (39%) with the statement, "Teaching performance is a critical gauge in determining an individual's fitness for promotion and tenure." Eight percent of respondents "strongly disagreed" (6%) or "disagreed" (2%) with the statement. Four percent of respondents were neutral on the topic.

Seventy-eight respondents indicated that students played the largest role in classroom instructional evaluation. Respondents also reported that Peers/Faculty (44) and Chairpersons (27) were perceived as playing a significant, but smaller role in instructional evaluation.

Base on the data, a definitive conclusion regarding the fairness and accuracy of classroom instructional evaluation could not be conducted. Forty-one percent of respondents "strongly agreed" (2%) or "agreed" (39%) with the statement, "The methods used for evaluating classroom instruction at my institution are fair and accurate." Forty-one percent of respondents "strongly disagreed" (12%) or "disagreed" (29%) with the statement. Eighteen percent of respondents were neutral on the topic.

Service

The majority of respondents viewed all three categories of service (Professional, University and Community) as a critical gauge in determining an individual's fitness for promotion and tenure. However, the value placed on community service was somewhat mixed. Sixty-eight percent of respondents "strongly agreed" (9%) or "agreed" (59%) with the statement, "Professional service is a critical gauge in determining an individual's fitness for promotion and tenure." Eleven percent of respondents "strongly disagreed" (3%) or "disagreed" (8%) with the statement. Twenty-one percent of respondents were neutral on the topic.

Slightly more than 65% of respondents "strongly agreed" (8%) or "agreed" (58%) with the statement, "University/institutional service is a critical gauge in determining an individual's fitness for promotion and tenure." Seventeen percent of respondents "strongly disagreed" (4%) or "disagreed" (13%) with the statement. Seventeen percent of respondents were neutral on the topic.

Forty-three percent of respondents "strongly agreed" (5%) or "agreed" (38%) with the statement, "Community service is a critical gauge in determining an individual's fitness for promotion and tenure." Thirty-one percent of respondents "strongly disagreed" (7%) or "disagreed" (24%) with the statement. Twenty-six percent of respondents were neutral on the topic.

The results of this quantitative descriptive research study re-affirm the notion that perceptions of faculty workload items used to determine fitness for promotion and tenure are not uniform throughout collegiate aviation. One perception reported as a constant was the belief that all "three pillars," scholarship, teaching and service, possessed some degree of importance in the promotion and tenure process. Respondents indicated that Teaching (M = 4.22) was slightly more "important" than Scholarship (M = 4.18) toward successfully achieving promotion and tenure at their institution. Respondents also reported that Service was viewed as "somewhat important" (M = 3.33) in the pursuit of promotion and tenure.

Respondents reported that all scholarly activities were perceived as possessing some level of value. However, three scholarly activities were viewed as having greater "value" toward successfully achieving promotion and tenure requirements: a "Peer-Reviewed Journal Article" (M = 4.60), "Publishing a Book" (M = 4.55) and an "Externally Funded Grant" (M = 4.41). Other research activities were viewed as having "very little value" or being "somewhat of value". This study determined that collegiate aviation administrators and faculty perceive specific workload components and scholarly activities as possessing greater value than others in successfully completing the promotion and tenure process. This knowledge can serve to guide probationary faculty members in the conduct of their scholarly effort.

Recommendations

The following recommendations for future research are provided:

- Conduct a research study comparing the perceptions of administrators versus faculty on the topic of promotion and tenure.
- Conduct a research study that compares the promotion and tenure perceptions of administrators and faculty from non-aviation institutions with that of like individuals from "aviation specific" institutions.
- Conduct a research study that reports the perceptions of administrators and faculty on the topic of promotion and tenure at two-year collegiate aviation institutions.

References

- American Association of University Professors. (2006). *1940 Statement of principles on academic freedom and tenure*. Retrieved from http://www.aaup.org/AAUP/ pubsres/policydocs/contents/1940statement.htm
- Best, J. W., & Kahn, J. V. (1998). *Research in education* (8th ed.). Needham Heights, MA :Allyn and Bacon.
- Best, J. W., & Kahn, J. V. (1993). *Research in education* (7th ed.). Needham Heights, MA: Allyn and Bacon.
- Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Embry-Riddle Aeronautical University. (2010). Embry-Riddle Aeronautical University. Where the mind meets the sky. *Mission, Vision and Goals*, 8. Retrieved from http://spa.erau.edu/e20/Mission Vision and Goals Jan11.pdf
- Emmert, P., & Rollman, S. (1997). A national survey of tenure and promotion standards in communication departments. *Journal of the Association for Communication Administration*, 1, 10–23.
- Gelmon, S., & Agre-Kippenhan, S. (2002). Promotion, tenure, and the engaged scholar: Keeping the scholarship of engagement in the review process. *AAHE Bulletin*, 54(5), 7-11.
- Glassick, C. E. (2000). Boyer's expanded definitions of scholarship, the standards for assessing scholarship, and the elusiveness of the scholarship of teaching. *Academic Medicine*, 75(9), 877-880.
- GreatBrook. (2007). *Statistical Confidence in a Survey*. Retrieved from http://www.greatbrook.com/survey_statistical_confidence.htm
- Green, R. G. (2008). Tenure and promotion decisions: The relative importance of teaching, scholarship, and service. *Journal of Social Work Education*, 44(2), 117-127.
- Modern Language Association of America. (2007). Report of the MLA task force on evaluating scholarship for tenure and promotion. *Profession*, 9-71.
- Phillips, J. J. (1997). *Handbook of training evaluation* (3rd ed.). Houston, TX: Gulf Publishing Company.

- Purdue University. (2011). Provost promotion and tenure guidelines on 2011-12. *General Criteria for Promotion*. Retrieved from http://www.purdue.edu/provost/ documents/Promotion%20and%20Tenure%20Policy%20WL%20Campus% 20-%202011-12%20AY.pdf
- Ruiz, J. R. (2009). Airline Internships Career Implications: Participant Perceptions. Saarbrücken, Germany: Lambert Academic Publishing.
- Southern Illinois University. (1996). Promotion policies and procedures for faculty. *Policies and Procedures*. Retrieved from http://policies.siuc.edu/policies/ promotfa.html
- The Ohio State University. (2011). 3335-6-02 Criteria for appointment, reappointment, and promotion and tenure of tenure-track faculty. Board of Trustees. Retrieved from http://trustees.osu.edu/rules6/ru6-02.php
- University Aviation Association. (2010). *Professional membership list*. Retrieved from http://www.uaa.aero/sitefiles/uaa/members/Mbrlist_2010_10_Prof.pdf.
- University Aviation Association. (2011). UAA description. Retrieved from http://www.uaa.aero/Default.aspx.
- University of North Carolina Greensboro. (2009). University promotion and tenure guidelines. Retrieved from http://provost.uncg.edu/documents/ personnel/PTguidesUNCG.pdf

Appendix

Promotion and/or Tenure Perceptions at Collegiate Aviation Institutions

The purpose of this survey is to examine the perceptions of aviation faculty and chairpersons regarding components of the tenure and/or promotion process at collegiate aviation institutions.

Instructions

Response to this survey should be based on YOUR opinions/perceptions - not the opinions/perceptions of others. This survey <u>does not require</u> short narrative responses; however, space has been provided on several questions, if needed. The survey should require no more than 15 minutes of your time. Your assistance is greatly appreciated!

Questions 1 through 5 address survey participant's demographic information.

1. My current position in the aviation academic field is:

Choose one of the following answers:

- O Department Chairperson (or similar position)
- (Full) Professor (faculty)
- O Associate Professor (faculty)
- O Assistant Professor (faculty)
- O Other

2. I am considered in my aviation academic institution as:

Choose one of the following answers:

Tenured
Not Tenured

3. My collegiate aviation academic institution is categorized under the Carnegie Foundation as a:

Choose one of the following answers:

- O Doctorate-granting Research University ("very high" research activity)
- O Doctorate-granting Research University ("high" research activity)
- O Doctoral/Research University
- O Non-research intensive institution
- I do not know

4. My collegiate aviation academic institution is a:

Choose one of the following answers:

- 4-year institution with a graduate program
- 4-year institution without a graduate program
- O 2-year institution
- O I do not know
- O Other
- 5. Approximately, how many students attend your collegiate institution?

Choose one of the following answers:

- O Less than 10,000
- O Between 10,000 and up to 20,000
- O Between 20,000 and up to 30,000
- Between 30,000 and up to 40,000
- Greater than 40,000 students
- I do not know

Questions 6 through 20 address your perceptions of Scholarship, Teaching and Service in the Promotion and Tenure Process.

Survey Definitions

<u>Scholarship</u> is defined as the advancement of the aviation discipline body of knowledge through the performance of research and creative activities in the field of aviation.

<u>Teaching</u> is defined as any instruction or instruction-related activity.

<u>Service</u> is defined as voluntary activity that serves to assist and promote the institution, profession, and local community.

6. Identify the importance of each of the following workload components toward successfully achieving promotion and/or tenure requirements at your institution.

(Not Important =1, Minimally Important-2, Somewhat Important=3, Important=4, Very Important=5)

Please choose the appropriate response for each item:

	1	2	3	4	5
Scholarship	0	0	0	0	0
Teaching	0	0	0	0	0
Service	0	0	0	0	0

7. Assign a value to each of the following scholarship activities provided below.

How valuable are each of the following scholarly activities weighted toward successfully achieving promotion and/or tenure requirements at your institution?

(Not Valuable=1, Very Little Value=2, Somewhat of Value=3, Valued=4, Most Valued=5)

Please choose the appropriate response for each item:

	1	2	3	4	5
Aviation trade magazine article	0	0	0	0	0
Book review	\circ	0	\circ	\circ	0
Conference/Professional presentation	\circ	0	0	\circ	0
Consultantship	\circ	0	\circ	\circ	0
Externally funded grant	\circ	0	0	\circ	0
Internally funded grant	\circ	0	0	\circ	0
Research posters	\circ	0	0	\circ	0
Member of peer-reviewed journal panel	\circ	0	0	\circ	0
Non-peer reviewed abstract, conference proceedings, etc.	\circ	0	\circ	\circ	0
Non-peer reviewed journal article	\circ	0	0	\circ	0
Peer-reviewed abstract, conference proceedings, etc.	\circ	0	0	\circ	0
Peer-reviewed journal article	\circ	0	0	\circ	0
Publishing a book	\circ	0	0	\circ	0
Publishing a chapter in a book	0	0	0	0	0

7a. If there are additional scholarship activities that you feel should be added to the list in question 7 above, please provide those activities and rank them in accordance with question 7 above.

8. Assign a value to each publication venue provided below.

How valuable is an article published in one of the following publication venues weighted toward successfully achieving promotion and/or tenure requirements at your institution?

(Not Valuable=1, Very Little Value=2, Somewhat of Value=3, Valued=4, Most Valued=5)

Please choose the appropriate response for each item:

	1	2	3	4	5
Academic and Business Research Institution (AABRI)	0	0	0	0	0
American Technical Education Association (ATEA)	0	0	0	0	0
Aviation trade magazine article	0	0	0	0	0
Collegiate Aviation Review (CAR)	0	0	0	0	0
International Journal of Applied Aviation Studies (UAAS)	0	0	0	0	0
International Journal of Professional Aviation Training and Testing Research (UPATTR)	0	0	0	0	0
The International Journal of Safety across High-Consequence Industries	0	0	0	0	\bigcirc
Journal of Air Transportation (JAT)	0	0	0	0	0
Journal of Aviation/Aerospace Education and Research (JAAER)	0	0	0	0	0
Journal of Aviation Management and Education (JAME)	0	0	0	0	0
Non-peer reviewed journal publications	0	0	0	0	0
Other	0	0	0	0	0

8a. If there are additional publication venues that you feel should be added to the list in question 8 above, please provide those venues and rank them in accordance with question 8 above.

Please write your answer here:

9. Do you consider a single-author publication more valuable than a multi-author publication in achieving promotion and/or tenure at your institution?

Choose one of the following answers:

O Yes

O No

• A single-author publication and a multi-author publication possess the same value

I do not know

10. Do you believe that being identified as the first-author in a multi-author publication is more valuable than other authorships in achieving promotion and/or tenure at your institution?

Choose one of the following answers:

O Yes

🔘 No

O All authorships possess equal value

I do not know

11. Are authors in multi-author publications required to report percentages of individual effort/contribution made in the development of the publication during the promotion and/or tenure process at your institution?

Choose one of the following answers:

Yes
 No
 I do not know

12. Assign a value to each scholarship venue provided below.

How valuable is a scholarship activity in one of the following venues toward successfully achieving promotion and/or tenure requirements at your institution?

(Not Valuable=1, Very Little Value=2, Somewhat of Value=3, Valued=4, Most Valued=5)

Please choose the appropriate response for each item:

	1	2	3	4	5
International	0	0	0	0	0
Local	0	\circ	\circ	0	0
National	0	0	0	0	0
Regional	0	0	0	0	0
State	\circ	\circ	\circ	\circ	0

13. Do you agree or disagree with the following statement?

"Scholarship is a critical gauge in determining an individual's fitness for promotion and/or tenure."

Choose one of the following answers:

- O Strongly Disagree
- O Disagree
- O Neither
- O Agree
- O Strongly Agree

13a. Please provide any comments you may have relating to question 13 above.

Please write your answer here:

14. Do you agree or disagree with the following statement in the promotion and/or tenure process?

"The methods used for evaluating classroom instruction at my institution are fair and accurate."

Choose one of the following answers:

- Strongly Disagree
- O Disagree
- O Neither
- O Agree
- O Strongly Agree

14a. Please provide any comments you may have relating to question 14 above.

15. How is classroom instruction evaluated at your institution?

Check any that apply:

- Instructional evaluation (performed by students)
- Instructional evaluation (performed by peers/faculty)
- Instructional evaluation (performed by chairperson)
- I do not know

15a. Please provide any comments you may have relating to question 15 above.

Please write your answer here:

16. Do you agree or disagree with the following statement?

"Teaching performance is a critical gauge in determining an individual's fitness for promotion and/or tenure."

Choose one of the following answers:

- O Strongly Disagree
- O Disagree
- O Neither
- O Agree
- O Strongly Agree

16a. Please provide any comments you may have relating to question 16 above.

17. Do you agree or disagree with the following statement?

"Professional service is a critical gauge in determining an individual's fitness for promotion and/or tenure."

Choose one of the following answers:

- O Strongly Disagree
- O Disagree
- O Neither
- O Agree
- O Strongly Agree

17a. Please provide any comments you may have relating to question 17 above.

Please write your answer here:

18. Do you agree or disagree with the following statement?

"University/institution service is a critical gauge in determining an individual's fitness for promotion and/or tenure."

Choose one of the following answers:

O Strongly Disagree

O Disagree

O Neither

O Agree

O Strongly Agree

18a. Please provide any comments you may have relating to question 18 above.

19. Do you agree or disagree with the following statement?

"Community service is a critical gauge in determining an individual's fitness for promotion and/or tenure."

Choose one of the following answers:

- Strongly Disagree
- O Disagree
- O Neither
- O Agree
- O Strongly Agree

19a. Please provide any comments you may have relating to question 19 above.

Please write your answer here:

20. Do you agree or disagree with the following statement?

"Probationary (tenure track) faculty members at my institution receive <u>annual</u> promotion and tenure progress and/or reviews."

Choose one of the following answers:

- O Yes
- O No

I do not know

20a. Please provide any comments you may have relating to question 20 above.

Please write your answer here:

Thank you for completing this survey.