# Campus-Based Practices for Promoting Student Success: Faculty Policy Issues

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> Midwestern Higher Education Compact



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## About this MHEC Research Brief Series

This research brief is drawn from specific topics examined in the forthcoming MHEC report, *Institutional Practices Conducive to Student Success: An Overview of Theory and Research.* 

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# Campus-Based Practices for Promoting Student Success: Faculty Policy Issues

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The academic profession has encountered significant change over the past several decades, such as a higher priority on research; increasing enrollment of non-traditional students; the need to manage, advise, and instruct larger student bodies; and greater expectations to use instructional technologies (Gappa & Leslie, 1993: Geiger, 2011; Schuster & Finkelstein, 2006, 2007; Umbach & Wawrzynski, 2005). The faculty profession has transformed over time from a body of full-time tenured or tenure-track academics to a diverse group of employees with myriad designations: full-and part-time, tenure and non-tenure track, adjunct, lecturer, instructor, and post-doctoral fellow (Kezar & Eaton, 2014). Full-time, tenured and tenure-track faculty are characterized by duties related to teaching, research, and service. In contrast, full- and part-time non-tenure track or "contingent" faculty members often have more limited responsibilities. This brief examines key issues that confront institutional leaders in creating faculty policies conducive to student success, including employment status, faculty roles and reward systems, and faculty development.

#### Work Time Allocation

Faculty work long hours and many devote the majority of their time to teaching and teachingrelated activities (e.g., class preparation, grading), though the distribution of faculty work time varies by institutional type (AAUP, 2014; NCES, 2008; Townsend & Rosser, 2007; Schuster & Finkelstein, 2006; Zinker, 2014). According to data from the National Study of Postsecondary Faculty (NCES, 2008), faculty worked on average 52-56 hours per week at four-year institutions and 49 hours per week at two-year colleges. The amount of time allocated for teaching varied from 43-44 percent at research universities to 55-56 percent at doctoral universities, 65-68 percent at comprehensive universities, and 78 percent at two-year colleges. Whereas faculty at two-year colleges allocated only 4 percent of their time to research, those at research universities devoted 33-34 percent of their time to research and scholarship. The amount of time devoted to other activities- including administration, professional development, and service – showed little variation across institutional types, averaging 18-23 percent of faculty work time (NCES, 2008).

#### **Employment Status**

Over the last 40 years, the instructional mission of postsecondary institutions has been increasingly fulfilled by part-time and non-tenure track full-time faculty (Geiger, 2011; Kezar & Eaton, 2014; Kezar & Sam, 2010). Tenured and tenure-track faculty constituted 78 percent of the faculty workforce in 1969 (Schuster & Finkelstein, 2006) but only 34 percent of the workforce in 2009 (AFT, 2009).<sup>1</sup> The greater reliance on contingent faculty has resulted primarily from institutional efforts to adapt to diminished state support for higher education, rising student enrollment, and a heightened concern for maximizing efficiency (Baldwin & Chronister, 2001; Eagan & Jaeger, 2008; Gappa & Leslie, 1993; Slaughter & Rhoades, 2004). However, recent research suggests that the utilization of part-time contingent faculty may ultimately thwart progress towards the goal of promoting student learning and degree completion (Eagan & Jaeger, 2008, 2009; Ehrenberg & Zhang, 2005; Jacoby, 2006; Jaeger & Eagan, 2009). Specifically, the proportion of part-time faculty on campus or exposure to part-time faculty has been negatively associated with transfer to a four-year institution among community college students (Eagan & Jaeger, 2009), student persistence at four-year institutions (Eagan & Jaeger, 2008), graduation rates at community colleges (Jacoby, 2006; Jaeger & Eagan, 2009), and graduation rates at four-year institutions (Ehrenberg & Zhang, 2005). Ehrenberg and Zhang (2005) observed that a 10 percentage point increase in the percentage of part-time faculty predicted a 3 percentage point decrease in graduation rates at public four-year institutions. While controlling for student background characteristics, Jaeger and Eagan (2009) estimated that a typical community college student with half of all courses taught by part-time instructors would be 5 percent less likely to complete an associate's degree than a student who completed courses taught only by full-time faculty.

The negative impact of part-time faculty can be partly attributed to low teaching quality (Baldwin & Wawrzynski, 2011; Geiger, 2011; Umbach, 2007). Umbach (2007) found that, relative to fulltime tenured and tenure-track professors, part-time instructors were less likely to use active and collaborative pedagogies, had lower expectations for students' academic effort, and spent less time on course preparation. Moreover, part-time faculty frequently lack office space, office hours, and time to interact with students outside of class (Eagan & Jaeger, 2008; Schuster, 2003; Schuster & Finkelstein, 2006). Indeed, Cox et al. (2010) found that part-time faculty status predicted lower frequency of both casual and substantive interactions with students. This may directly influence the

<sup>&</sup>lt;sup>1</sup> Approximately 50 percent of all instructional faculty were employed on a full-time basis at degree-granting institutions in 2011 (NCES, 2012).

quality of the educative process since frequent and high-quality interactions between faculty and students have been positively associated with self-reported learning and persistence (Cotten & Wilson, 2006; Kuh & Hu, 2001; Pascarella & Terenzini, 1980).

Whereas exposure to part-time faculty under current institutional conditions appears to be quite detrimental to student outcomes, research on the use of full-time, non-tenure track faculty has yielded more mixed results. Ehrenberg and Zhang (2005) estimated that a 10 percentage point increase in the percentage of full-time, non-tenure track faculty predicted a 2 percentage point decrease in graduation rates at public four-year institutions. However, Eagan and Jaeger (2008) did not detect an association between exposure to full-time, non-tenure track faculty and student persistence into the second year at four-year institutions. More recently, Cheng (2013) examined student course ratings at the University of California, San Diego, and found that tenure status was not associated with students' evaluations of learning outcomes, instructor recommendations, and course recommendations after controlling for class size and teaching experience.

#### **Faculty Roles and Rewards**

A key imperative for institutional leaders is to create work conditions that are conducive to the recruitment and retention of highly productive faculty (Gappa, Austin, & Trice, 2007). However, many have questioned whether faculty role expectations and reward structures are aligned with the instructional mission at four-year colleges and universities (Geiger, 2011; O'Meara, 2011; O'Meara & Braskamp, 2000; Schuster, 2003). While teaching, research, and service have constituted the historical duties of tenured and tenure-track faculty at most four-year institutions, research and grant awards have been the primary indicators used for promotion and tenure decisions over the past several decades (Boyer, 1990; Horta, Dautel, & Veloso, 2012; Fairweather, 2005; Townsend & Rosser, 2007; Schuster & Finkelstein, 2006). Fairweather (2005) found in his analysis of data from the 1998-99 National Survey of Postsecondary Faculty that the number of hours spent teaching predicted a lower salary, and the number of publications a higher salary. Notably, these effects were observed across all types of four-year institutions: research, doctoral, comprehensive, and liberal arts.

The priority of research arguably casts a dim light on the value of effective teaching (Cassuto, 2014). Accordingly, Boyer (1990) insisted that "what we urgently need today is a more inclusive view of what it means to be a scholar- a recognition that knowledge is acquired through research, through

synthesis, through practice, and through teaching" (p. 24). Some institutions have thus worked to reform their reward structures to accommodate a more well-rounded view of faculty work, efforts that appear to have been successful (O'Meara, 2005, 2006; O'Meara & Braskamp, 2005). O'Meara (2005) examined data from a national study of chief academic officers at four-year institutions and found that when teaching was assigned a more equitable status in promotion decisions, the alignment between faculty work and institutional missions increased, and a higher value was placed on undergraduate student engagement and learning.

Absent any significant reform of tenure and promotion policies, some have proposed that role specialization would facilitate the recruitment and retention of effective instructors, wherein distinct tracks are created for faculty who wish to specialize in teaching, research, or both (Bunton & Mullon, 2007; Clegg & Esping, 2005; Grant, 2014; O'Meara, 2011; Westergard, 1991). Proponents of role specialization or workload differentiation can employ at least two types of arguments: (a) research and teaching productivity are not strongly related and (b) effective teaching and research may depend upon distinctive skills and dispositions. The traditional view in higher education holds that research and teaching are complementary roles, for an active research agenda compels faculty to keep abreast of disciplinary knowledge, fosters an exchange between students and faculty at the frontiers of knowledge, and provides students with a model for pursuing scientific inquiry (Boyer, 1990; Brew, 2010; Buckley, 2011; Kane, Sandretto, & Heath, 2004; Willcoxson, Manning, Johnston, & Gething, 2011; Willison, 2012). However, past research on the teaching-research nexus has demonstrated that teaching and research are disparate rather than synergistic enterprises (Bellas & Toutkoushian, 1999; Hattie & Marsh, 1996, 2002). Hattie and Marsh's (1996) meta-analysis of 58 studies revealed that the correlation between teaching quality and research productivity was very small (r= .07 at research universities; r= .15 at liberal arts colleges). Moreover, whereas time spent on research is unrelated to teaching quality (Hattie & Marsh, 1996), the amount of time spent on undergraduate teaching predicts lower research productivity and job satisfaction (Mamiseishvili & Rosser, 2011).

Rhetorical support for role specialization also follows from the observation that the nature of teaching and research differ greatly and thus the interests, dispositions, and competencies necessary for each may not always coexist within the same individual (Fox, 1992; for an overview, see Hattie &

Marsh, 1996). In an early study, Rushton, Murray, and Paunonen (1983) found that effective teachers tended to possess such traits as being sociable, extraverted, supportive, non-authoritarian, and non-defensive. Conversely, Feist's (1998) meta-analysis revealed that "creative scientists are more aesthetically oriented, ambitious, confident, deviant, dominant, expressive, flexible, intelligent, and open to new experiences than their less creative peers" (p. 296). Research on student evaluations of teaching has further shown that student success is positively associated with a teacher's degree of organization, utilization of course objectives, clarity, and enthusiasm (Feldman, 2007; Pascarella, Salisbury, & Blaich, 2011; Pascarella & Terenzini, 2005; Wright & Jenkins-Guarnieri, 2012). For example, Pascarella, Salisbury, and Blaich's (2011) study of first-year undergraduate students at 19 four-year and two-year institutions revealed that exposure to teachers with organized and clear instruction (e.g., uses time effectively, gives clear explanations, strong subject knowledge) predicted higher odds of persistence into the second year.

A few institutions have thus developed flexible promotion systems that allow faculty to pursue either a scholarly or teaching path with the overall goal of enhancing institutional productivity and student outcomes (see Bunton & Mullon, 2007; Clegg & Esping, 2005; O'Meara, 2011). For example, the "flexible allocation" system at Kansas State University evaluates each faculty member in areas that best match his or her talents and the department's mission. Five assumptions framed the KSU approach: "(1) time and talent constitute 90 percent of the university's resources, (2) each department must clearly understand its mission, (3) faculty members must collectively decide how to achieve the mission, (4) the reward system must appropriately recognize the various categories of achievement, and (5) the university's success depends heavily on maximizing the skills and talents of faculty members according to the department's mission" (p. 171). Additional research is needed to determine whether role specialization options ultimately improve student outcomes.

#### **Faculty Development**

Faculty development refers to programmatic efforts to improve faculty teaching and scholarly competence (Eble & McKeachie, 1985). A principal objective is to assist faculty members in understanding students' learning styles and fostering the ability to use effective pedagogies, including cooperative learning and service-learning (Diaz et al., 2009). However, despite their potential role in improving student outcomes, only 300 postsecondary institutions have formalized

faculty development programs (CTSE, 2013; Hickson, Sheek & Loughman, 2008). Moreover, existing faculty development programs may vary in the extent to which they maintain a clear linkage with student development objectives, and many programs fail to garner strong institutional support (Davis et al., 2003; Hickson, Sheeks, & Loughman, 2008; Weimer, 1990). Among the few published studies on the impact of faculty development programs, Bennett and Bennett (2003) conducted a pre/post-test evaluation of a faculty training program for using Blackboard 5.0. Upon completing the program, participants reported more favorable attitudes towards computers for pedagogical purposes and greater self-efficacy in using computers.

#### **Recommended Practices**

- Establish an appropriate balance of full-time and part-time faculty that preserves educational quality.
- Ensure that part-time faculty receive adequate institutional support that promotes effective pedagogies, high expectations for student outcomes, time for course preparation, and both time and space for interactions with students outside of class.
- Ensure that promotional criteria are consistent with the instructional mission of the institution, such as assigning equitable status to indicators of effective teaching in tenure and promotion reviews.
- Consider providing alternative pathways for faculty who wish to specialize in teaching, research, or both. Evaluate the extent to which workload differentiation enhances productivity, job satisfaction, and student outcomes.
- Incentivize participation in faculty development programs to ensure that instructors are capable of implementing effective pedagogies.

## References

- AAUP. (2014). Losing focus: The annual report on the economic status of the profession, 2013-14. *Academe*, *100*(2).
- AFT. (2009). American academic: The state of the higher education workforce 1997-2007. Washington, D.C.: Author.
- Baldwin, R. G., & Chronister, J. L. (2001). *Teaching without tenure: Policies and practices for a new era*. Baltimore, MD: The Johns Hopkins University Press.
- Bellas, M. L., & Toutkoushian, R. K. (1999). Faculty time allocations and research productivity: Gender, race, and family effects. *The Review of Higher Education, 22*(4), 367-390.
- Bennett, J., & Bennett, L. (2003). A review of factors that influence the diffusion of innovation when structuring a faculty training program. *The Internet and Higher Education*, 6(1), 53-63.
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate.* Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Brew, A. (2010). Imperatives and challenges in integrating teaching and research. *Higher Education Research & Development, 29*(2), 139-150.
- Buckley, C. A. (2011). Student and staff perceptions of the research-teaching nexus. *Innovations in Education and Teaching International*, 48(3), 313-322.
- Bunton, S. A., & Mallon, W. T. (2007). The continued evolution of faculty appointment and tenure policies at U.S. medical schools. *Academic Medicine*, *82*(3), 281-289.
- Cassuto, L. (2014, May 27). Can we create a culture that values good teaching? *The Chronicle* of Higher Education. Retrieved from http://chronicle.com/article/Can-We-Create-a-Culture-That/ 146779/
- Cheng, D. A. (2013). Effects of professorial tenure on undergraduate ratings of teaching performance. *Education Economics*, DOI: 10.1080/09645292.2013.826632.
- Clegg, V. L., & Esping, G. R. (2005). Optimism with our eyes wide open: Reconsidering scholarship at Kansas State University. In K. O'Meara & R. E. Rice (Eds.), *Faculty priorities reconsidered: Rewarding multiple forms of scholarship* (pp. 164-186). San Francisco, CA: Jossey-Bass.
- Cotten, S. R., & Wilson, B. (2006). Student-faculty interactions: Dynamics and determinants. *Higher Education*, *51*, 487-519.
- Cox, B. E., McIntosh, K. L., Terenzini, P. T., Reason, R. D., & Quaye, B. R. L. (2010). Pedagogical signals of faculty approachability: Factors shaping faculty-student interaction outside the classroom. *Research in Higher Education*, *51*(8), 767-788.
- CTSE. (2013). Teaching & Learning Centers in the United States [Data Chart]. Hempstead, NY: Center for Teaching and Scholarly Excellence. Retrieved from http://www.hofstra.edu/Faculty/CTSE/ctse\_links.cfm
- Davis, G, Foley, B. J., Hom, E., Neal, E., Redman, R. & Riper, M. V. (2003). Creating a comprehensive faculty development program. *Journal of Faculty Development*, *19*(1), 19-28.

- Diaz, V., Garrett, P. B., Kinley, E. R., Moore, J. F., Schwartz, C. M., & Kohrman, P. (2009). Faculty Development for the 21st Century. *Educause Review*, 44(3), 46-55. Retrieved from http://www. educause.edu/ero/article/faculty-development-21st-century
- Eagan, M. K., & Jaeger, A. J. (2008). Closing the gate: Part-time faculty instruction in gatekeeper courses and first-year persistence. *New Directions for Teaching and Learning*, 115, 39-53.
- Eagan, M. K., & Jaeger, A. J. (2009). Effects of exposure to part-time faculty on community college transfer. *Research in Higher Education*, *50*(2), 168-188.
- Eble, K. E., & McKeachie, W. J. (1985). Improving undergraduate education through faculty development. San Francisco, CA: Jossey-Bass.
- Ehrenberg, R. G., & Zhang, L. (2005). Do tenured and tenure-track faculty matter? *The Journal of Human Resources*, 40(3), 647-659.
- Fairweather, J. S. (2005). Beyond the rhetoric: Trends in the relative value of teaching and research in faculty salaries. *The Journal of Higher Education*, *76*(4), 401-422.
- Feldman, K. A. (1997). Identifying exemplary teaching: Using data from course and teacher evaluations. *New Directions for Teaching and Learning*, 65, 41-50.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review, 2*(4), 290-309.
- Fox, M. F. 1992. Research, teaching, and publication productivity: Mutuality versus competition in academia. Sociology of Education 65: 293–305.
- Gappa, J. M., Austin, A. E., & Trice, A. G. (2007). *Rethinking faculty work*. San Francisco, CA: Jossey-Bass.
- Gappa, J. M., & Leslie, D. W. (1993). The invisible faculty: Improving the status of part-timers in higher education. San Francisco, CA: Jossey-Bass.
- Geiger, R. L. (2011). Optimizing research and teaching: The bifurcation of faculty roles at research universities. In J. C. Hermanowicz (Ed.), *The American academic profession: Transformation in contemporary higher education* (pp. 21-43). Baltimore, MD: The Johns Hopkins University Press.
- Grant, A. (2014, February 5). A solution for bad teaching. *The New York Times.* Retrieved from http://www.nytimes.com/2014/02/06/opinion/a-solution-for-bad-teaching.html?emc=edit\_tnt\_ 20140205&tntemail0=y&\_r=0
- Hattie, J., & Marsh, H. W. (1996). The relationship between research and teaching: A meta-analysis. *Review of Educational Research*, 66(4), 507-542.
- Hattie, J., & Marsh, H. W. (2002). The relation between research productivity and teaching effectiveness: Complementary, antagonistic, or independent constructs? *The Journal of Higher Education*, *73*(5), 603-641.
- Hickson, J., Sheeks, G., & Loughman, T. (2008). A quality enhancement model: Connecting faculty development with the achievement of student learning outcomes and institutional goals. *The Journal of Faculty Development, 22*(1), 5-10.

- Horta, H., Dautel, V., & Veloso, F. M. (2012). An output perspective on the teaching-research nexus:
- An analysis focusing on the United States higher education system. *Studies in Higher Education*, 37(2), 171-187.
- Jacoby, D. (2006). Effects of part-time faculty employment on community college graduation rates. The Journal of Higher Education, 77(6), 1081-1103.
- Jaeger, A. J., & Eagan, M. K. (2009). Unintended consequences examining the effect of parttime faculty members on Associate's degree completion. *Community College Review, 36*(3), 167-194.
- Kane, R., Sandretto, S., & Heath, C. (2004). An investigation into excellent tertiary teaching: Emphasizing reflective practice. *Higher Education*, 47, 283-310.
- Kezar, A., & Eaton, J. (2014). An examination of the changing faculty: Ensuring institutional quality and achieving desired student learning outcomes. CHEA Occasional Paper, CHEA. Retrieved from http://www.uscrossier.org/pullias/wp-content/uploads/2014/01/CHEA\_Examination\_ Changing\_Faculty\_2013.pdf
- Kezar, A. J., & Sam, C. (2010). Understanding the new majority of non-tenure-track faculty in higher education: Demographics, experiences, and plans of action. San Francisco, CA: Jossey-Bass.
- Kuh, G. and Hu, S. (2001). The effects of student–faculty interaction in the 1990s. *Review of Higher Education 24*(3), 309–332.
- Mamiseishvili, K., & Rosser, V. J. (2011). Examining the Relationship between Faculty Productivity and Job Satisfaction. *Journal of the Professoriate*, *5*(2), 100-132.
- NCES. (2008). Percentage distribution of full-time faculty and instructional staff in degree-granting institutions, by level and control of institution, selected instruction activities, and number of classes taught for credit: Fall 2003. Retrieved from http://nces.ed.gov/programs/digest/d12/tables/dt12\_292.asp
- NCES. (2012). Number of instructional faculty in degree-granting institutions, by employment status, sex, control, and level of institution: Selected years, fall 1970 through fall 2011. Retrieved from http://nces.ed.gov/programs/digest/d12/tables/dt12\_290.asp
- O'Meara, K. (2005). Encouraging multiple forms of scholarship in faculty reward systems: Does it make a difference? *Research in Higher Education*, *46*(5), 479-510.
- O'Meara, K. (2006). Encouraging multiple forms of scholarship in faculty reward systems: Have academic cultures really changed? *New Directions for Institutional Research*, *129*, 77-95.
- O'Meara, K. (2011). Inside the panopticon: Studying academic reward systems. In J. C. Smart & M. B. Paulsen (Eds.), *Higher education: Handbook of theory and research* (pp. 161-220). New York, NY: Springer.
- O'Meara, K., & Braskamp, L. (2005). Aligning faculty reward systems and development to promote faculty and student growth. *NASPA Journal*, *42*(2), 223-240.
- Pascarella, E. and Terenzini, P. (1980). Student–faculty and student–peer relationships as mediators of the structural effects of undergraduate residence arrangement. Journal of Educational Research, 73(6), 344–353.

- Pascarella, E. T., & Terenzini, P. (2005). *How college affects students: A third decade of research.* San Francisco, CA: Jossey-Bass.
- Pascarella, E. T., Salisbury, M. H., & Blaich, C. (2011). Exposure to effective instruction and college persistence: A multi-institutional replication and extension. *Journal of College Student Development*, 52(1), 4-19.
- Rushton, J. P., Murray, H. G., & Paunonen, S. V. (1983). Personality, research creativity, and teaching effectiveness in university professors. *Scientometrics*, *5*(2), 93-116.
- Schuster, J. H. (2003). The faculty makeover: What does it mean for students? In E. Benjamin (Ed.), Exploring the role of contingent instructional staff in undergraduate learning (pp. 15-22). San Francisco, CA: Jossey-Bass.
- Schuster, J. H., & Finkelstein, M. J. (2006). *The American faculty: The restructuring of academic work and careers.* Baltimore, MD: The Johns Hopkins University Press.
- Schuster, J. H., & Finkelstein, M. J. (2007). On the brink: Assessing the status of American faculty. Berkeley, CA: University of California, Berkley.
- Slaughter, S., & Rhoades, G. (2004). Academic capitalism and the new economy: Markets, state, and higher education. Baltimore: Johns Hopkins University Press.
- Townsend, B. K., & Rosser, V. J. (2007). Workload issues and measures of faculty productivity. *Thought & Action*, 23, 7-19.
- Umbach, P. D. (2007). How effective are they? Exploring the impact of contingent faculty on undergraduate education. *The Review of Higher Education*, *30*(2), 91-123.
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, *46*(2), 153-184.
- Willcoxson, L., Manning, M. L., Johnston, N., & Gething, K. (2011). Enhancing the research-teaching nexus: Building teaching-based research from research-based teaching. *International Journal of Teaching and Learning in Higher Education*, 23(1), 1-10.
- Willison, J. W. (2012). When academics integrate research skill development in the curriculum. *Higher Education Research & Development*, 31(6), 905-919.
- Weimer, M. (1990). Improving college teaching. San Francisco, CA: Jossey-Bass.
- Westergard, J. (1991). Scholarship, research, and teaching: A view from the social sciences. *Studies in Higher Education*, 16, 23-28.
- Wright, S. L., & Jenkins-Guarnieri, M. A. (2012). Student evaluations of teaching: combining the meta-analyses and demonstrating further evidence for effective use. Assessment & Evaluation in Higher Education, 37(6), 683-699.
- Zinker, J. (2014). The long, lonely job of homo academicus: Focusing the research lens on the professor's own schedule. *The Blue Review*. Retrieved from https://thebluereview.org/faculty-time-allocation/



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