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Market Pay: A National Academic Struggle to Compensate a High Demand Discipline

By Dr. Jeffrey M. Ulmer, Dr. Scott Wilson, and Dr. John Sutton

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Dr. Jeffrey M. Ulmer is an Assistant Professor of Engineering Technology and Industrial Management at the University of Central Missouri in Warrensburg, Missouri, teaching both undergraduate and graduate students. Ulmer is a Certified

Six Sigma Black Belt and a Certified Manager of Quality & Organizational Excellence; both certifications are with the American Society for Quality. He is also a trained Lean Six Sigma Black Belt (from the Regal-Beloit Corporation) and has worked for 25 years in industry in the areas of product engineering, quality assurance / control, and production management.



Dr. Scott Wilson is a Professor of Automotive Technology Management at the University of Central Missouri in Warrensburg, Missouri with over 25 years of teaching and administrative experience. He currently holds certifications from the Association of Technology, Management, and Applied Engineering (ATMAE); the International Fluid Power Society (FPS); and the National Institute for Automotive Service Excellence (ASE).

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Dr. John Sutton is a Professor and Chair of the School of Technology at the University of Central Missouri. He teaches and advises students in undergraduate and graduate programs. His primary interest areas are in labor relations,

collective bargaining, industrial management, and materials processing. Research areas include activities in all of the curricular focal points listed above.

Market Pay: A National Academic Struggle to Compensate a High Demand Discipline

By Dr. Jeffrey M. Ulmer, Dr. Scott Wilson, and Dr. John Sutton

Abstract

Twenty-seven out of seventy-eight Association of Technology, Management, and Applied Engineering affiliated national colleges and universities participated in a random survey to determine competitive (market) pay salary levels and to obtain concepts for funding faculty salary increases for individuals in high demand Industrial Technology and Engineering Technology programs. Salary levels were evaluated and it was determined that only the terminally-degreed assistant professor rank obtained a statistical significance of $p = .01$ [$F(1, 17) = 8.32$] when a one-way cost-of-living nationally-adjusted ANOVA test was conducted between institutions who use competitive pay against those who do not. Competitive pay funding methods included state funds/budgets, grants, tuition increases, unionization, financial reserves, and collapsing of existing open faculty positions. Applied Industrial Technology and Engineering Programs competitive pay benchmarking to organizations such as AAUP, ATMAE, and CUPA-HR were also considered important.

Introduction

Faculty teach in a wide array of disciplines at colleges and universities in the United States. Competitive pay (also called Market Pay) is often paid to educators in high demand disciplines (Marthers & Parker, 2008). Through competitive pay institutions are provided with a method to attract and retain academically qualified educators – that is if a college or university or willing to fund it. Chrusciel & Field (2003) list four critical success factors that any organization, including ones focused on education, must address for acceptance

and actuation within their organization:

- Top management support
- Perceived utility
- Perception of organizational readiness to deal with change
- Perception of personal gain

This national ATMAE study was conducted to expand on survey results obtained in a Midwestern United States 2008 survey conducted by the authors and point out the need for competitive pay adjustments on behalf of high demand disciplines. Information herein will provide administrative academics with an insight on competitive pay struggles for Industrial Technology and Engineering Technology faculty. Study support is presented by a brief literature review on market pay, compensation currently paid to educators, and survey results of United States educational institutions (27 out of 78 responded).

Review of Literature

Herzog (2008) states that faculty should receive competitive pay based upon internal and external market factors within an academic unit. Competitive pay makes it possible for high demand academic disciplines to hire the most qualified and capable employees. Per Marthers & Parker (2008) market-based pay is:

Salaries calibrated to the market are set nationally, reflecting the going rates by field or demographic. The market-based model assumes that faculty members are defined as much by their disciplinary affiliation as by their institutional association. The salaries of individual faculty members in high-demand fields reflect market rates. (§ 7)

Furthermore, Marthers & Parker (2008) also report that institutional administrators will often award market-based pay to new hires and counter-offer market-equitable salaries to existing high quality faculty who are considering another institution's offer of a position (§ 17). While this compensation plan works well for new hires and "other employment" faculty, it does not help existing high demand employees not considering a job change. In the case of non-moving existing faculty, "publication records, grant-supported research, or quality teaching" may not be enough (Herzog, 2008, p.50, § 2). In these situations other biases of age, gender, and ethnicity/race may come into play (Herzog, 2008, p.54).

Competitive pay should not generate an entitlement mentality on the part of a high demand faculty member. While competitive pay may facilitate "regular raises, scheduled promotions, and a secure job" (Wagner, 1998, § 2), entitlement is not part of a competitive market pay recipient's achievement list. Administration officials understand that faculty members are like any other commodity and can, and do, command market-based salaries in highly sought after academic disciplines.

The recession of 2009 has constrained many college and university budgets across the United States (June, 2009; Shieh, 2009). But despite a readjusting economy, there are institutions in our nation who have substantially reorganized their infrastructure in order to hire the best and the brightest within the academic pool (Wilson, 2009, § 5). These forward-thinking institutions have made smart hiring a priority. Per Joseph A. Chapman, President of North Dakota State University, the "economic downturn plaguing most of the country has combined with his university's unusual robustness to create a "perfect storm" for the campus. The university will make 39 tenured or tenure-track hires this year. People are looking at places they wouldn't have traditionally looked, and that's coming together for us right now when we're emerging on the scene." (Wilson, 2009, § 23).

Dire economic conditions may force college and university administrators to rethink current administrative support levels if a perceived burden is present (Bunsis, 2009) or reconsider the level of adjunct use. Adjunct utilization may help meet short term academic concerns, yet generate existing tenured and tenure-track faculty who are disconnected, feel like second class citizens, reduce involvement in faculty governance, and become administrators of the "outside" adjunct workforce (Maxwell, 2009). Per Maynard and Joseph (2008, § 1), "recent estimates of the proportion of college faculty who are employed on a part-time, temporary basis hover between 40 and 45%." This fact underscores the reason why "younger faculty currently entering the professoriate are increasingly less engaged in the affairs of their institutions, in fulfilling their responsibilities inherent in the model of shared governance, and in assuming those roles that will prepare them for institutional leadership." (Maxwell, 2009, § 1). Adjunct exploitation in low pay and benefits is nothing new in the community college realm, but four year colleges and universities are learning and exploring the same practices (Louis, 2009).

The Integrated Postsecondary Education Data System (IPEDS) defines Industrial Technology as "a program that prepares individuals to apply basic engineering principles and technical skills in support of industrial engineers and managers. This includes instruction in optimization theory, human factors, organizational behavior, industrial processes, industrial planning procedures, computer applications, and report and

presentation preparation." ("IPEDS I.T.," 2009). This definition aligns well with the Industrial Technology definition provided by the National Association of Industrial Technology (NAIT): "field of study designed to prepare technical and/or technical management-oriented professionals for employment in business, industry, education and government" as shared by Minty (2003, p.3, § 1). This definition is also supported by the Bachelor of Science in Industrial Technology program at the Eastern Illinois University ("Eastern," 2009).

The Integrated Postsecondary Education Data System (IPEDS) defines Engineering Technology as ("IPEDS E.T.," 2009):

A program that generally prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in a wide variety of projects. This includes instruction in various engineering support functions of research, production, and operations, and applications to specific engineering specialties (§ 1).

This definition aligns well with the Engineering Technology definition provided by the American Society for Engineering Education (ASEE) who defines Engineering Technology as ("ASEE Definition," 2009):

The profession in which a knowledge of mathematics and natural sciences gained by higher education, experience, and practice devoted primarily to the implementation and extension of existing technology for the benefit of humanity. (§ 1).

Table 1. Faculty compensation – means listed

Rank	ATMAE 2009	AAUP 2008-09	CUPA-HR 2008-09
Full Professor	86,328	\$81,655	\$87,276
Assoc. Professor	73,072	\$65,709	\$71,120
Assist. Professor	64,872	\$55,537	\$62,172
New Asst. Prof.	63,957	-	\$60,776
Instructor	48,286	\$42,723	\$48,286

Table 1 provides mean salary comparisons for the Association of Technology, Management, and Applied Engineering (ATMAE) in 2009 (non-administrative faculty for 9-12 months; 75% return rate; 380 faculty responding) (“ATMAE,” 2010; A. Zargari, personal communication, February 3, 2010); American Association of University Professors (AAUP) in 2008-09 (includes Category IIA Master’s salaries for the West North Central Region – Includes Missouri; 1,259 reporting institutions) (“AAUP,” 2009); and the College and University Professional Association for Human Resources (CUPA-HR) in 2008-09 (9-10 month full-time contracts; 837 institutions [500 private, 337 public]; 218,564 faculty members) for Engineering Technologies / Technicians (“Higher Ed Jobs,” 2009).

Figure 1 provides graphical reference of mean faculty compensation presented from within Table 1.

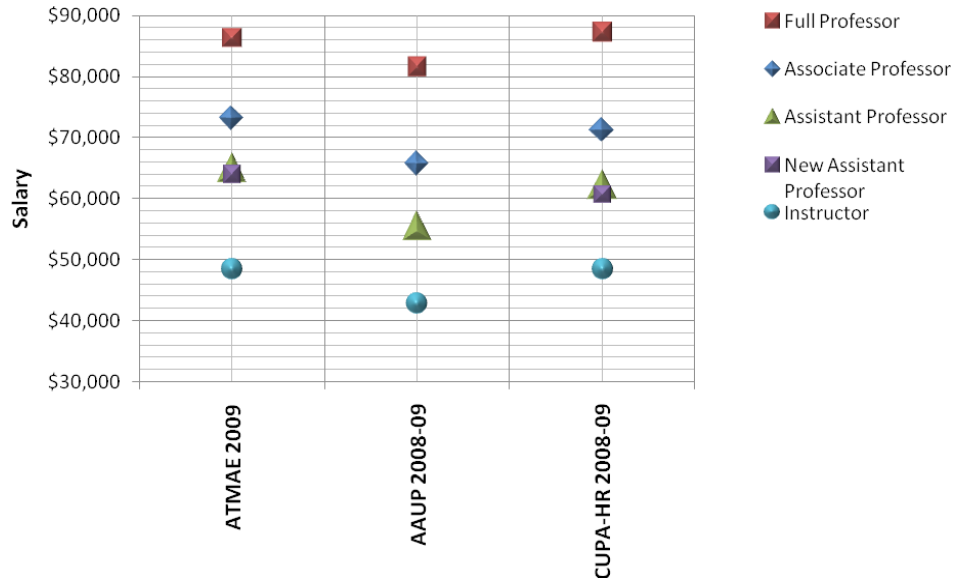
Purpose of the Study

The purpose of this study was twofold: 1) to determine competitive (market) pay salary levels for faculty in Industrial Technology and Engineering Technology programs at United States colleges and universities, and 2) to obtain concepts for funding faculty salary increases for individuals in these programs.

Methodology

A twenty-two question online survey was developed for a random group of (78) ATMAE-affiliated United States colleges and universities who possess Industrial Technology and Engineering Technology programs. Information was obtained from deans and chairs through an introductory email and enclosed web link to the survey. The survey was posted from mid-September through the end of October, 2009. See Appendix A for the content of the online survey. Individually-listed United States’ college and university survey responses were kept confidential for this study. Descriptive survey data was used to categorize accrediting agencies used by state, region, sub-region, programs, degree levels offered, student body size,

Figure 1. Faculty compensation – means shown



competitive pay status, organizations used for competitive pay adjustments, faculty leaving due to lack of competitive pay, and faculty leaving within or outside of their respective state. A listing of competitive pay funding methods is provided.

A one-way analysis of variance (ANOVA) test was performed for each academic ranking in terms of institutions offering, or not offering, competitive pay by region and sub-region. Several institutions indicated “I Don’t Know” and therefore their supplied ranking salaries were not analyzed in ANOVA testing. An alpha level of .05 was used to determine if the use of competitive pay was statistically significant between institutions using it against those who did not. A nationally-adjusted cost of living index (COLI) adjustment was also conducted on all institutions offering, or not offering competitive pay, regardless of region or sub-region, for statistical significance. This adjustment and comparison is justified by Herzog (2008, p. 54) who claims that “cost of living adjustments should be made for salary equivalence.” The COLI adjustment was calculated by comparing the highest ranked state for COLI and then by raising all lower-ranked COLI states to the same level. For example, the state of New York has a COLI of 1.258 and

Missouri’s COLI is .912 (“MERIC,” 2009; “C2ER,” 2009). This equates to a percentage differential of 34.6%. This percentage was used to increase Missouri institutional rank-reported data by 34.6% - hence reported institutional pay was adjusted for equivalence for rank.

Limitations exist in the study due to potentially limiting information provided by survey respondents. For instance, some faculty may leave educational institutions for other reasons besides salary. It is possible that survey respondents may not be aware of the true reason for a faculty member’s departure from their institution.

Survey Results

Twenty seven United States colleges and universities responded to the survey out of a pool of seventy eight (response rate: 34.6%). State representation equated to thirteen out of twenty eight states (response rate: 46.4%; reference Figure 2 for the state, sub-regional, and regional breakdown). Institutional response by region included: West (none), South (9), Midwest (17), and Northeast (1).

Eight institutions use the Accrediting Board for Engineering and Technology – Technology Accrediting Commission

(ABET-TAC); twenty seven use the Association of Technology, Management, and Applied Engineering (ATMAE).

College and university degree levels offered by respondents included: two for professional certification; four for undergraduate (Associate – 2 year); twenty one for undergraduate (Bachelor – 4 year); thirteen for graduate (Masters); and two for graduate (Doctoral).

Industrial Technology student body size by institution varied from 0 to 1001+ students. Six programs contained 51 - 100 students, and five programs contained 151 - 200 students. Engineering Technology student body size by institution varied from 0 to 1001+ students. Two programs contained 26 – 50 students, and four programs contained 51 - 100 students.

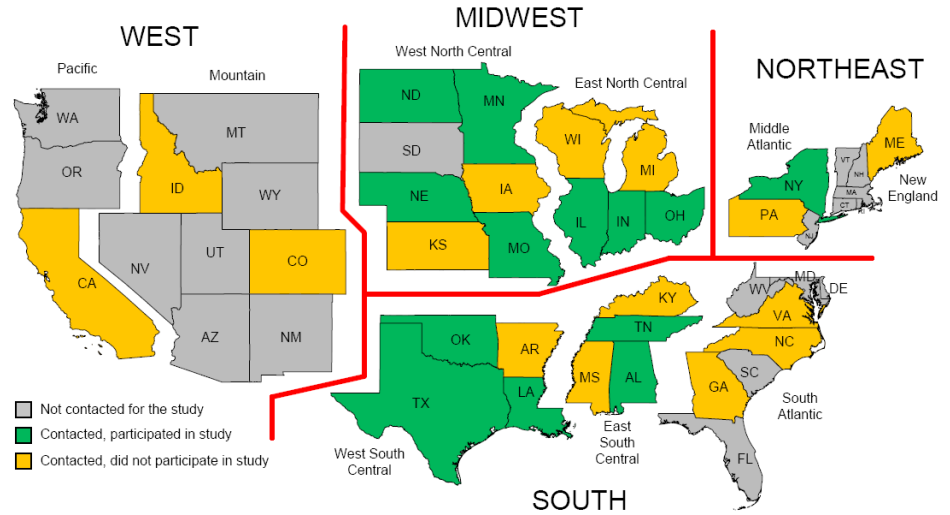
Ten institutions provided competitive pay compensation benchmarking for their Industrial Technology and Engineering Technology programs. Nine institutions did not adjust for benchmarking. Eight institutions did not know if an adjustment for benchmarking was in place.

Ten institutions that used competitive pay benchmarking to professional organizations used the following to set faculty salary levels: AAUP, ABET, ACCE, ASEE, ATMAE, CUPA-HR, and other. Note: several survey participants listed one or more of these professional organizations for establishment of competitive pay.

Twenty one faculty members have left survey-responding institutions for industry due to salary in the last five years. Fifteen faculty members were lost to other engineering-related programs due to salary in the last five years. Of the employee losses reported, one was lost from one institution to another institution (within the same state); five were lost to other state institutions in another state.

Funding methods currently used, or in planning for use, to support competitive pay by the responding survey respon-

Figure 2. Survey participation by region, sub-region and state



dents consisted of the following for Industrial Technology and Engineering Technology faculty members:
State funds.

- No competitive adjustments for existing faculty; new hires are paid market pay.
- Funding through university budgeting priorities.
- None. Market pay policies exist but there is no formal structure to allocate funds for this purpose.
- Grants, FTE, and tuition.
- Unionization of faculty may help.
- Tuition increase and other reserves.
- Funding to come from open lines in the college.

Survey respondents stated the following under a general comment section regarding competitive pay and their respective institution's situation:

- Raises are based upon the state economy and availability of funds – merit pay is not provided either.
- We do not raise the salaries of existing personnel in response to competitive market conditions. They are left to the annual increases from the collective bargaining unit. We do attempt to increase salary offerings for new faculty, which creates an often ugly salary compression scenario.
- Most faculty at this institution have close family ties and industry relationships that keep them here.

Flexible teaching hours and two day weeks enable significant outside earning.

Statistical Results

Statistical testing was limited to the Midwest region and sub-regions due to lack of competitive (market) pay information supplied by survey respondents (see Table 2). Statistical testing was conducted within the Midwest region (combining East North Central and West North Central sub-regional data), within the Midwest East North Central sub-region, within the Midwest West North Central sub-region, and by COLI-Adjusted Competitive Pay Institutions (all 19 institutions).

Midwest Region (including East and West South Central Sub-Regions)

Using the one-way ANOVA for institutions who use competitive pay against those who do not, the following non-statistically significant rank results were obtained: Instructor, $F(1, 10) = 3.45, p = .093$; Assistant Professor (without terminal degree), $F(1, 6) = .04, p = .845$; New Assistant Professor (with terminal degree), $F(1, 10) = 1.97, p = .191$; Assistant Professor (with terminal degree), $F(1, 10) = 1.87, p = .201$; Associate Professor, $F(1, 12) = .31, p = .589$; and Full Professor, $F(1, 9) = .37, p = .559$. Review Table 3 for a listing of mean salaries by rank.

Table 2. Survey responses – competitive pay status by number within regions and sub-regions

Region / Sub-Region	Competitive Pay (Yes)	Non-Competitive Pay (No)	Competitive Pay Status (Unknown)
Midwest			
East North Central	5	5	1
West North Central	2	3	1
Northeast	0	1	0
South	3	0	6
West	0	0	0

N = 27 institutions (both competitive and non-competitive pay; 13 states) participated. The South region was not segregated into sub-regions since non-competitive pay data was not available for statistical analysis.

Midwest Region - East North Central Sub-Region

Using the one-way ANOVA for institutions who use competitive pay against those who do not, the following non-statistically significant rank results were obtained: Instructor, $F(1, 6) = 1.38, p = .284$; Assistant Professor (without terminal degree), $F(1, 3) = .12, p = .751$; New Assistant Professor (with terminal degree), $F(1, 5) = .11, p = .758$; Assistant Professor (with terminal degree), $F(1, 6) = .69, p = .439$; Associate Professor, $F(1, 7) = .26, p = .629$; and Full Professor, $F(1, 6) = .02, p = .894$.

Midwest Region - West North Central Sub-Region

Using the one-way ANOVA for institutions who use competitive pay against those who do not, the following non-statistically significant rank results were obtained: Instructor, $F(1, 2) = 12.12, p = .074$; Assistant Professor (without terminal degree), $F(1, 1) = 7.29, p = .226$; New Assistant Professor

(with terminal degree), $F(1, 3) = 4.32, p = .129$; Assistant Professor (with terminal degree), $F(1, 2) = 1.95, p = .297$; and Associate Professor, $F(1, 3) = .09, p = .782$. Full Professor could not be calculated due to the requirement of two levels in ANOVA testing (missing salary data for one institution).

COLI-Adjusted Competitive Pay Institutions

Using the one-way ANOVA for institutions who use competitive pay against those who do not (all 19 competitive pay institutions), the following non-statistically significant results were obtained: Instructor, $F(1, 17) = .19, p = .669$; Assistant Professor (without terminal degree), $F(1, 17) = 2.18, p = .158$; New Assistant Professor (with terminal degree), $F(1, 17) = .01, p = .916$; Associate Professor, $F(1, 17) = 2.23, p = .154$; and Full Professor, $F(1, 17) = 1.31, p = .268$. Assistant Professor (with terminal degree) proved to be statistically significant at $F(1, 17) = 8.32, p = .01$.

Conclusions and Implications for Higher Education

The results of this study indicate that United States higher education considers accreditation and competitive pay important for Industrial Technology and Engineering Technology faculty compensation. Many of the college and university respondents surveyed use AAUP, ATMAE, or CUPA-HR for competitive pay adjustments for faculty at their institutions. Twenty one faculty members leaving their institutions for industry employment within the last five years may or may not be significant. Likewise, the fifteen faculty members who left academia for other engineering-related institutions in the last five years may also highlight the need for salary adjustments in the institutions they left behind. Compensations may or may not have been a reason for the one faculty member who left one institution for a different in-state institution. Losing five faculty members to other out-of-state institutions also possesses the same level of ambiguo-

Table 3. Midwest region survey results – mean salaries by rank

Rank	Competitive Pay Institutions	Non-Competitive Pay Institutions	% Diff.	Value
Full Professor	\$84,722	\$81,568	3.72%	\$3,154
Assoc. Professor	\$70,631	\$67,820	3.98%	\$2,811
Asst. Prof. (w/T.D.)	\$64,658	\$57,499	11.07%	\$7,159
New Asst. Prof. (w/T.D.)	\$61,862	\$56,259	9.05%	\$5,603
Asst. Prof. (w/o T.D.)	\$52,123	\$52,195	-0.01%	-\$72
Instructor	\$50,826	\$42,463	16.45%	\$8,363

N = 10 for competitive pay institutions; N=9 for non-competitive pay institutions

ity for their reasons in changing jobs. Anecdotal data supplied by the survey respondents did not provide enough information to get a clear picture of other non-compensation-related reasons for leaving their institutions.

Only the Assistant professor (with a terminal degree) rank yielded a statistical significance of $p = .01$ when reported institutional salaries were adjusted by state for cost of living between competitive and non-competitive pay institutions. This was surprising considering that this national study included twenty seven institutions. It is possible that the competitive pay gap is becoming smaller between institutions who have competitive pay and those that do not.

It is possible that part of the lesser pay differential between competitive and non-competitive pay institutions is due to institutions offering higher salary packages to incoming junior faculty. Two survey respondents mentioned that while competitive pay adjustments are not considered for existing faculty, their institutions do attempt to lure new faculty with higher, market pay level, salaries.

Respondent commentary on funding competitive pay plans at United States institutions leave faculty to consider current legacy methods of funding such as: state funds/budgets, grants, tuition increases, unionization, financial reserves, and collapsing of existing open faculty positions. None of these solutions appear to be an end-all to competitive pay funding for Industrial Technology, Engineering Technology, or other existing high demand disciplines in academia. The answer for compensation enhancement may only come from a combination of the solutions shared by this survey's respondents.

One survey respondent may have given institutions their only viable means of hiring and retaining faculty members. Faculty members with close family and industrial ties to a given region, coupled with flexible teaching hours and two day weeks, along with significant outside earnings, may be the only academic salvation of our nation's

colleges and universities. That is, along with a large pool of adjuncts.

Future Research

Additional Association for Technology, Management, and Applied Engineering research should be conducted to obtain higher levels of participation and potentially statistically significant results for colleges and universities who either have, or do not have, competitive pay compensation in place for high demand academic disciplines in Industrial Technology and Engineering Technology. Results from this study could be used by college and university administrators to properly compensate qualified faculty. An increased participation level in this national study may indicate statistical significance of rank outside of assistant professor salaries that have been nationally-adjusted for cost of living.

Further research could also be opened up beyond ATMAE. Researchers could solicit competitive pay information from ATMAE, ASEE, and ABET-TAC accredited institutions. An increase of sample size for Industrial Technology and Engineering Technology programs may provide a better illustration of actual competitive pay conditions within the continental United States.

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Appendix A – Survey

Survey Background:

Participation in this research survey is voluntary and confidential. No question within this survey asks for your name or email address – although it does request the state of your academic institution. Responding to this online survey indicates consent to participate in the research study. Once the survey has begun, you may withdraw at any time by closing your browser up until the survey is submitted.

This survey is of minimal risk and does not require a letter of consent since no contact information is obtained, or computer-to-computer tracing information (about the survey participant) is provided to the principal investigator after the survey has been taken. The benefit of this survey for participants is only through the knowledge that research is being conducted on academic competitive pay for another academic institution. No monetary or social benefit is provided for participants in this study.

The Internet survey should take approximately 2 to 5 minutes and will be offered to each participant for an unlimited number of attempts (just in case you do not have the information the first time). No participant will receive future emails or communication about their past participation in the survey. Each participant should delete the email received from the School of Technology or support personnel.

The principal investigators for this research are Dr. Jeffrey M. Ulmer, Dr. Scott Wilson, and Dr. John Sutton. They may be contacted by phone (660-543-8337) or via e-mail at the University of Central Missouri in Warrensburg. Individuals interested in obtaining raw data from this survey may email the principal investigators.

Survey Purpose and Instructions:

1. The purpose of this confidential research survey is to determine competitive (market) pay salary levels for faculty in industrial technology and engineering technology programs at United States colleges and universities.
2. Obtain concepts for funding faculty salary increases for individuals in these programs.

NOTE: Participating individuals should have access to average wage information for lecturers, instructors, and professors (all ranks).

Information requested will also include data on how competitive (market pay) has been, or may be, funded at your university.

Final Assent:

If you agree to participate in this study, you may proceed to page 2 of the survey by clicking the “Continue” button below. If you do not agree with the information presented above, please close your browser to exit this survey.

Thank you for your time and effort!

Dr. John Sutton
Chair and Professor
University of Central Missouri

Appendix A – Survey

1. The state that you work in:
 - Alabama
 - Arkansas
 - California
 - Colorado
 - Georgia
 - Iowa
 - Idaho
 - Illinois
 - Indiana
 - Kansas
 - Kentucky
 - Louisiana
 - Maine
 - Michigan
 - Minnesota
 - Missouri
 - Mississippi
 - North Carolina
 - North Dakota
 - Nebraska
 - New York
 - Ohio
 - Oklahoma
 - Pennsylvania
 - Tennessee
 - Texas
 - Virginia
 - Wisconsin
 - Other
2. If your state was not listed in question 1, type in your state name:
Textbox _____
3. Industrial Technology and Engineering Technology accreditation(s) (check all that apply):
 - Accrediting Board for Engineering & Technology (ABET-EAC; Engineering)
 - Accrediting Board for Engineering & Technology (ABET-TAC; Engineering Technology)
 - American Council for Construction Education (ACCE)
 - American Society for Engineering Education (ASEE)
 - Association of Technology, Management, and Applied Engineering (ATMAE, formerly NAIT)
 - None
 - Other
4. If your Industrial Technology and Engineering Technology program(s) are accredited through a different organization than those listed in question 3, type in your accreditation provider:
Textbox _____
5. Degree levels offered in your Industrial Technology or Engineering Technology program (check all that apply):
 - Professional Certification
 - Undergraduate (Associate - 2 year)
 - Undergraduate (Bachelor - 4 year)
 - Graduate (Masters)
 - Graduate (Doctoral)
 - Other
6. Industrial Technology student body size (total number of majors in all programs):
 - 0
 - 1 – 25
 - 26 – 50
 - 51 – 100
 - 101 – 150
 - 151 – 200
 - 201 – 250
 - 251 – 300
 - 301 – 375
 - 376 – 500
 - 501 – 650
 - 651 – 800
 - 801 – 1000
 - 1001+
7. Engineering Technology student body size (total number of majors in all programs):
 - 0
 - 1 – 25
 - 26 – 50
 - 51 – 100
 - 101 – 150
 - 151 – 200
 - 201 – 250
 - 251 – 300
 - 301 – 375
 - 376 – 500
 - 501 – 650
 - 651 – 800
 - 801 – 1000
 - 1001+
8. Does your institution provide competitive (market) pay for industrial technology and engineering technology faculty?
 - Yes
 - No
 - I don't know
9. If applicable, check the organization used for yearly competitive (market) pay benchmarking:
 - AAUP
 - ABET
 - ACCE
 - ASEE
 - ATMAE (Formerly NAIT)
 - CUPA-HR
 - Other
 - Our institution does not benchmark pay for faculty

Appendix A – Survey

10. If your institution has a different benchmarking organization than those listed in question 9, type in your organization's name:

Textbox _____

Note: The following questions only apply to faculty employed in Industrial Technology and Engineering Technology Programs.

11. Enter the average salary paid to Lecturers (Adjunct, part-time, leave out the comma):

Textbox _____

12. Enter the average salary paid to Instructors (9 to 10 month contract, leave out the comma):

Textbox _____

13. Enter the average salary paid to Assistant Professors without a terminal degree (9 to 10 month contract, leave out the comma):

Textbox _____

14. Enter the average salary paid to NEW Assistant Professors (less than two years) (9 to 10 month contract, leave out the comma):

Textbox _____

15. Enter the average salary paid to all Assistant Professors (9 to 10 month contract, leave out the comma):

Textbox _____

16. Enter the average salary paid to Associate Professors (9 to 10 month contract, leave out the comma):

Textbox _____

17. Enter the average salary paid to Full Professors (9 to 10 month contract, leave out the comma):

Textbox _____

18. List the number of faculty who have left your institution for industry due to salary in the last five years.

Textbox _____

19. List the number of faculty you have lost to other engineering-related programs due to salary in the last five years.

Textbox _____

20. Of the faculty you lost to other engineering-related programs, did they stay within your state or go to another state?

Textbox _____

21. State how your institution has funded, or plans to fund, competitive (market) pay for industrial technology and engineering technology faculty members. Supply a web link to your policy and wage structure if available.

Textbox _____

22. General comments related to this survey:

Textbox _____