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Teaching Perspectives of Faculty Members at an 1862 Land-grant University: A Snapshot of One Institution with Implications for Improving Instruction at All

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As part of a larger study, this report describes the dominant teaching perspectives of faculty members with teaching appointments at an 1862 land-grant institution. A census study of the institution's faculty was conducted during the Fall semester of 2013; 157 (12.1%) faculty members representing seven colleges provided usable responses. The participants completed Pratt and Collins' (n.d.) Teaching *Perspectives Inventory (TPI) to determine their dominant perspective(s), i.e.,* apprenticeship, developmental, nurturing, social reform, or transmission, and responded to questions about selected personal characteristics. All five dominant teaching perspectives were expressed by participants; 134 (85.5%) held a single dominant perspective. Apprenticeship was the most prevalent, followed by transmission and then developmental. About 15% identified with two or more perspectives. Some differences in dominant perspectives emerged by gender and college affiliation. Nearly half reported never taking a pedagogy/andragogy course. If faculty members are struggling with teaching or perceive the need to reinvigorate or reorient their approaches to instruction, taking the TPI could be a good first step, especially if followed by specific actions to improve their teaching. The TPI is available online and can be self-administered free of charge; takers receive an individualized report and advice on interpreting the results.

Keywords: dominant teaching perspectives; faculty; improving instruction; land-grant institutions

Introduction

John Campbell (1995) in his book, *Reclaiming a Lost Heritage*, described the founding principles, tripartite mission, purposes, and evolution of land-grant institutions in the United States. Moreover, he enumerated their many challenges, including the need to improve and modernize undergraduate and graduate teaching and learning, and stated:

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Forcing faculty into the classroom a given number of hours each week does not force teachers to engage the imagination of students. Real faculty productivity and student learning requires a voluntary commitment, as well as a strong interaction among students and teachers. (pp. 33–34)

This admonition implies the need for faculty members who are intrinsically motivated to engage in the act of teaching and focus on achieving its ultimate goal – *students who learn*. To that aim, "[f]aculty who strive to discover their own capacities and potential broaden their knowledge of themselves as professionals and become more enthusiastic about their teaching . . . [which] can foster student excitement about learning" (Brancato, 2003, p. 61). However, the National Research Council (2009) concluded, "most faculty are not aware of the research on teaching and learning because it is not a formal part of most graduate training" (p. 54).

Moreover, Kane, Sandretto, and Heath (2004) asserted instruction was more complicated than suggested by any list of *good teaching characteristics* which could be developed, e.g., see Rosenshine and Furst (1971) and Carroll (1963, 1989). Bess (1998) likened an effective university instructor to a talented theater artist, i.e., a skilled communicator and presenter who has the ability to discern an audience's nonverbal cues, effectively handle visual and auditory variables, and acutely differentiate and react to learners' moods and emotions. On the other hand, Brookfield (as cited in Moehl, 2011) dismissed the whole notion of effective teaching by asserting the diversity of today's students made achieving such an objective impossible. In other words, no one instructor can demonstrate the multitude of teaching behaviors required to meet the needs of all learners.

Nevertheless, institutions of higher learning exist (including land-grant universities), students attend with expectations of being taught and most public stakeholders anticipate the same, and teaching occurs for better or worse. This condition presupposes those individuals providing instruction, regardless of discipline, work from some form of epistemological prism or fount of beliefs about teaching and learning. To that end, the study reported was guided by a typology and aligned instrument intended to determine an instructor's dominant conception(s) about teaching, including the roles of teacher and student, as a tool for self-knowledge and professional improvement (Pratt, 1992; Pratt & Collins, n.d.; Pratt, Collins, & Jarvis-Selinger, 2001).

Teaching Perspectives

Teaching perspectives refer to the justification an instructor provides for the way he or she teaches; a teaching perspective – also referred to as a *conception* – emanates from an individual's teaching beliefs which give rise to his or her intentions and actions (Pratt, 1992). Pratt and Collins (n.d.) and Pratt et al. (2001) posited five primary teaching perspectives exist. The first is *Apprenticeship* – a teaching perspective that socializes learners so they acquire new behavioral

norms and ways of thinking and working. It is characterized by a master-apprentice relationship that evolves over time as the learner's competence and independence increases. The second is *Developmental* – the belief in utilizing the learner's prior knowledge to guide learning through questioning and "bridging knowledge" (Pratt et al., 2001, p. 3) on the basis of meaningful examples from "the learner's point of view" (Pratt et al., 2001, p. 3). The third is *Nurturing* – the perspective that self-concept, and therefore, self-efficacy is key to learning; it occurs when learners are nurtured to reach success due to their own ability and efforts with the instructor's help. This perspective stresses caring, encouragement, and support. The fourth is *Social reform* – the belief that instructors are change agents who challenge the status quo. Students are prepared to take a critical approach to knowledge acquisition as a way of empowering them for social action. The fifth teaching perspective is *Transmission* – a teaching perspective whose main concern is the efficient and accurate representation of content to the learner.

Teaching perspectives are anchored by specific beliefs and intentions which inform an instructor's teaching behaviors or actions (Pratt, 1992; Pratt & Collins, n.d.; Pratt et al., 2001). Moreover, teaching perspectives are interpretations of *self-as-instructor* and informed by an individual's prior experiences with instruction and learners. To that aim, the researchers explored the teaching perspectives of faculty members at Oklahoma State University.

Purpose of the Study

As part of a larger investigation to examine perceptions of burnout and job turnover intentions (Matofari, 2014), the researchers also sought to identify the teaching perspectives of faculty members at Oklahoma State University using Pratt and Collins' (n.d.) *Teaching Perspectives Inventory (TPI)*. Pratt and Collins' (n.d.) instrument reveals participants' self-reported, dominant teaching perspective(s). In addition, the researchers described faculty members' teaching perspectives by gender and college affiliation.

Methods

The population (N = 1,302) for this census study consisted of instructors who taught one or more courses during the fall semester of 2013 at Oklahoma State University. A pilot study included 50 instructors leaving 1,252 as the population for the main study. One hundred and fifty-seven instructors completed the survey questionnaire or 12.1% of the target population. Tables 1 through 3 present personal and professional characteristics of the participants.

Teaching Perspectives of Faculty Members at an 1862 Land-grant University

Characteristics	f	%	M	SD
Gender				
Male	88	56.1		
Female	68	43.3		
Missing	1	0.6		
Age in years				
25 to 34	18	11.5	31.56	1.69
35 to 44	36	22.9	39.89	2.62
45 to 54	42	26.8	50.26	2.41
55 to 64	35	22.3	58.57	2.34
65 to 85	16	10.2	67.44	3.22
Missing	10	6.4		
Highest degree held				
Doctorate	133	84.7		
Less than a doctorate/Other	23	14.7		
Missing	1	0.6		
College affiliation				
Arts & Sciences	70	44.6		
Agric. Sci. & Nat. Resc.	23	14.7		
Education	14	8.9		
Human Sciences	14	8.9		
Business	17	10.8		
Engr. Arch. & Tech.	11	7.0		
Vet. Med.	6	3.8		
Missing	2	1.3		
Tenure status				
Tenured	80	51.0		
Tenure track	33	21.0		
Not on tenure track	39	24.8		
Other/missing	5	3.2		

Table 1. Participants' Selected Characteristics of the Study's Participants (N = 157)

Characteristics	f	%	M	SD
Years of teaching experience a	t the university level			
Less than 5	21	13.4	2.38	0.97
5 to 14	58	36.9	9.19	3.31
15 to 24	37	23.6	19.11	3.13
25 to 34	21	13.4	28.67	2.90
35 to 44	15	9.6	38.27	3.41
45 to 54	2	1.3	45.00	0.00
Missing	3	1.9		
Courses taken in pedagogy/and	dragogy			
None	78	49.7		
1	26	16.6		
2	15	9.6		
3	8	5.1		
4 or more	27	17.2		
Missing	3	1.9		
Teaching appointment (%)				
Less than 20	5	3.2	14.00	2.24
20 to 39	23	14.7	27.78	4.59
40 to 59	53	33.8	46.89	4.30
60 to 79	29	18.5	70.17	6.19
80 to 100	27	17.2	94.07	8.99
Missing	20	12.7		

Table 2. Participants' Selected Professional Characteristics Related to Teaching (N = 157)

Table 3. Summary of Courses Taught by Participants: Level and Modes of Delivery (N = 157)

Number of Courses	Undergraduate Courses		Undergraduate Online Courses		Graduate Courses		Graduate Online Courses	
	f	%	f	%	f	%	f	%
None	30	19.1	133	84.7	66	42.0	124	79.0
1	51	32.5	11	7.0	51	32.5	11	7.0
2	35	22.3	2	1.3	19	12.1	3	1.9
3	22	14.0	-	-	1	0.6	-	-
≥ 4	10	6.4	-	-	1	0.6	-	-

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Instrumentation: Teaching Perspectives Inventory (TPI)

The researchers were granted permission to use the TPI by its developers. This instrument was designed to establish the dominant teaching perspective of respondents without promoting or preferring one perspective over another. Pratt and Collins (n.d.) and Collins and Pratt (2011) recognized that effectiveness in teaching was a function of context, discipline, and culture. Their instrument includes 45 items and was made available online in 2000 (Collins & Pratt, 2011). The inventory was suitable for this study because it was designed for teachers in adult and higher education. The five teaching perspectives have been found to be distinct, i.e., low interperspective correlations for all scales combined, r = 0.41, with internal consistencies averaging $\alpha = 0.76$ for the five scales (Collins & Pratt, 2011). Stability, as measured by test-retest reliability, is also considered acceptable or "passable" (Collins & Pratt, 2011, p. 11).

Items on the teaching beliefs part of the TPI asked respondents to agree or disagree with 15 statements by selecting one of five options on an ordinal scale: $1 = Strongly \, disagree$, 2 = Disagree, 3 = Neutral, 4 = Agree, and $5 = Strongly \, agree$. On the teaching intentions portion of the TPI, participants responded to 15 items indicating how often they accomplished each intention using a five-point scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Usually, and 5 = Always. The teaching actions portion of the TPI used the same response scale as the teaching intentions and asked respondents how often they engaged in 15 actions while teaching. Each perspective had a minimum score of nine and a maximum score of 45 with an average of 34. The total of 45 items on the TPI included 9 items for each of the five teaching perspectives: 3 items addressed beliefs, 3 assessed intentions, and 3 measured actions. The TPI's Cronbach's alpha reliability estimates for this study, as determined post-hoc, were beliefs = 0.68; intentions = 0.80; actions = 0.81; and overall = 0.90.

Data Collection and Analysis

Qualtrics® was used to create the study's online questionnaire. The population's electronic mail addresses were provided by the Office of Institutional Research and Information Management (OIRIM) at Oklahoma State University. The total time of data collection was 14 days. A prenotice was sent on October 28, 2013, followed by an *invitation to participate* in the study on October 30, 2013. A one-time *thank you/reminder* electronic mail message was sent on November 6, 2013. The total response was 206, including partially completed instruments; usable responses numbered 157. IBM® SPSS® software version 21 was used to calculate descriptive statistics for reporting the study's findings.

Limitations of the Study

A census involves the study of all members of a target population and alleviates sampling error (Creswell, 2012). However, only 12.1% of the possible respondents took part in this census study. The highest response rate was from the College of Human Sciences (14.8%), followed by the College of Arts and Sciences (13.1%). The lowest response rate was from the College of Engineering, Architecture, and Technology (7.2%). The participants may not have been sufficiently representative of the target population owing to the low response rate, which challenges generalizability. This shortcoming notwithstanding, the teaching perspectives reported may be similar to the views of faculty at other institutions due to the unique origin and evolution shared by 1862 land-grant universities (Campbell, 1995; Herren & Edwards, 2002).

Findings

Participants' Dominant Teaching Perspectives

Based on the distribution of participants' teaching beliefs, intentions, and actions, two (1.3%) held three dominant perspectives. Another 21 participants (13.4%) had two dominant teaching perspectives, and the remaining 134 (85.5%) expressed only a single dominant teaching perspective. *Apprenticeship* was the most prevalent perspective, as indicated by 53 participants (33.8%). It was followed by *transmission* with 37 (23.6%) adherents; *developmental* was held by 29 (18.5%); and the *nurturing* teaching perspective was expressed by 15 (9.6%) of the instructors (see Figure 1).

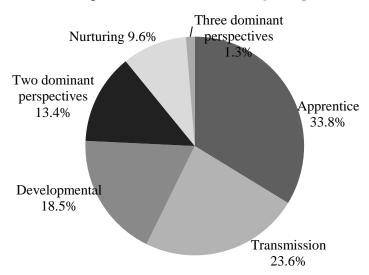


Figure 1. Participants' Dominant Teaching Perspectives (N = 157)

Note: The participant who indicated *social reform* is not displayed.

Table 4 highlights differences by gender in regard to participants' dominant teaching perspectives. Adherents to *apprenticeship* were about evenly divided based on gender: 53.8% were male and 46.2% female. However, more males (62.2%) than females (37.8%) held *transmission* as their dominant teaching perspective. A similar trend was apparent among participants who expressed *developmental* as their dominant teaching perspective. For every female who held *developmental* as her dominant perspective, more than two males aligned with that view. In other words, the proportion of males (69.0%) was more than double that of females (31.0%). On the contrary, more females (73.3%) than males (26.7%) were found to hold *nurturing* as their dominant teaching perspective.

Appro		Apprenticeship		Transmission		Developmental		Nurturing	
Gender	f	%	f	%	f	%	f	%	
Male	28	53.8	23	62.2	20	69.0	4	26.7	
Female	24	46.2	14	37.8	9	31.0	11	73.3	
Total	52	100.0	37	100.0	29	100.0	15	100.0	

Table 4. Dominant Teaching Perspectives by Gender

Table 5 shows the distribution of dominant teaching perspectives by participants' college affiliations. In the College of Arts and Sciences (CoAS), 36 participants had *developmental* as their dominant teaching perspective; 25 indicated *apprenticeship*; and 23 held *transmission* as their dominant teaching perspective. Eleven participants expressed *nurturing* as their dominant perspective. In comparison, 11 participants from the College of Agricultural Sciences and Natural Resources (CASNR) held *apprenticeship* as their dominant teaching perspective; eight participants indicated *transmission*. *Nurturing* with three and *developmental* with two were the other dominant teaching perspectives for participants from CASNR.

The College of Education's (CoE) participants equally held either *apprenticeship* or *nurturing* as their dominant teaching perspectives with five expressing each. Two participants specified *developmental* as their dominant teaching perspective, and one individual indicated *transmission*. *Apprenticeship* with eight participants, followed by six adherents to *developmental* were the top two teaching perspectives for faculty members in the College of Human Sciences (CoHS). *Transmission* was the third dominant teaching perspective with three participants, and one participant (0.6%) in CoHS specified *nurturing*.

The School of Business (SoB) participants indicated each of the dominant perspectives, including *social reform*. *Apprenticeship* was the most frequent perspective with 11 participants; next was *transmission* which was held by eight of the SoB participants. Another five participants from the SoB specified *developmental* as their dominant teaching perspective. Both *nurturing* and *social reform* were held by one participants. The College of Engineering, Architecture, and Technology (CEAT) had no participants who indicated *nurturing* or *social reform* as their dominant teaching perspectives. Instead, *transmission* and *apprenticeship* were

held as dominant perspectives by six participants each. Three participants from CEAT expressed *developmental* as their dominant teaching perspective. The College of Veterinary Medicine (CoVM) had three participants who indicated *transmission*, and the same number specified *apprenticeship* as their dominant teaching perspectives. One participant held *developmental* and another *nurturing* as their dominant perspectives.

	Transmission	Apprenticeship	Developmental	Nurturing	Social Reform
CoAS	23	25	36	11	0
CASNR	8	11	2	3	0
CoE	1	5	2	5	0
CoHS	3	8	6	1	0
SoB	8	11	5	1	1
CEAT	6	6	3	0	0
CoVM	3	3	1	1	0

Table 5. Frequency of Dominant Teaching Perspectives by College

Note: Frequencies account for expressions of more than one dominant teaching perspective.

Conclusions

The teaching perspective associated with the largest sum of commitment variables, i.e., *teaching beliefs, intentions,* and *actions,* is considered an instructor's dominant perspective (Pratt & Collins, n.d.; Pratt et al., 2001). All five of the dominant teaching perspectives were expressed by the study's participants. *Apprenticeship* was the most prevalent teaching perspective, followed by *transmission,* and then *developmental.* About 15% of the faculty members identified with two or more perspectives.

More male than female participants held *transmission, apprenticeship*, or *developmental* as their dominant teaching perspectives. However, more than twice as many female as male participants expressed *nurturing* as their dominant perspective. *Apprenticeship* was also the most frequent dominant teaching perspective by college affiliation; it was the top dominant teaching perspective for six of the seven colleges, including two ties, followed by *transmission* which tied for most prevalent in the case of two colleges. *Developmental*, however, stood out as the most dominant teaching perspective indicated by faculty members from CoAS.

Implications, Discussion, and Recommendations

Many instructors may not have deeply considered or introspectively examined their epistemological beliefs about teaching and learning or much less the importance of how such informs their practice. Moreover, Pratt et al. (2001) stressed "no perspective is either good or bad, and that excellent forms of teaching can occur within each of them – as can poor teaching" (p. 2). The point of instructors learning about their dominant teaching perspective(s) is not to

precipitate change from one to another or to endorse or diminish a given view. However, considering nearly half (49.7%) of the instructors reported never having taken a pedagogy/andragogy course, it stands to make a difference whether they know their dominant teaching perspectives and how that manifests student learning. For faculty members who may be struggling with teaching or perceive the need to reinvigorate or somehow reorient their approaches to instruction, taking the TPI could be *a good first step* on that journey, especially if followed by specific actions. Of note, the TPI is available online and can be self-administered free of charge; it includes an individualized report, i.e., a *profile sheet*, as well as advice on interpreting the results (http://www.teachingperspectives.com/tpi/).

Follow-up after taking the TPI could involve developing plans for improvement; consulting with peers considered exceptional teachers, including their provision of evaluations, interpreting students' formal, and informal feedback; participating in professional development; or joining a community of practice, among other approaches (National Research Council, 2009). In addition, discussions about espoused theories versus theories-in-use [action] (Argyris & Schön, 1974) may be useful. These actions combined with understanding cognitive (learning) styles (Kolb, 1984), the theory of multiple intelligences (Gardner, 2011), principles of andragogy (Boone, Safrit, & Jones, 2002; Knowles, 1980; Mezirow, 1991), and a variety of teaching methods and learning assessment strategies could complement instructors' self-knowledge about their dominant teaching perspectives and assist in improving instruction.

Is it not *past time* to act on the National Research Council's (2009) admonition regarding the preparation of graduate students destined to become university faculty with teaching responsibilities but who often receive little to no commensurate training? Some land-grant institutions are making admirable attempts through institutes, centers, and programs intended to help faculty improve their teaching (Brancato, 2003; National Research Council, 2009). But more is needed! Other than *sink or swim experiences* as teaching assistants and lab instructors, training for the professoriate should require learning experiences calibrated to prepare aspiring faculty to teach with the same rigor and expectancies associated with their mentoring to become premiere researchers. Doing any less would appear to support Pogo's famous refrain: *We have met the enemy and he is us* (Kelly, 1987).

References

- Argyris, C., & Schön, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, CA: Jossey-Bass.
- Bess, J. L. (1998). Teaching well: Do you have to be schizophrenic? *The Review of Higher Education*, 22(1), 1–15. doi:10.1353/rhe.1998.0019
- Boone, E. J., Safrit, R. D., & Jones, J. (2002). *Developing programs in adult education: A conceptual programming model* (2nd ed.). Long Grove, IL: Waveland Press.

- Brancato, V. C. (2003). Professional development in higher education. *New Directions for Adult and Continuing Education*, 2003(98), 59–66. doi:10.1002/ace.100
- Campbell, J. R. (1995). *Reclaiming a lost heritage: Land-grant and other higher education initiatives for the twenty-first century*. Ames, IA: Iowa State University Press.
- Carroll, J. B. (1963). A model of school learning. Teachers College Record, 64(8), 723-733.
- Carroll, J. B. (1989). The Carroll model: A 25-year retrospective and prospective view. *Educational Researcher*, *18*(1), 26–31.
- Collins, J. B., & Pratt, D. D. (2011). The Teaching Perspectives Inventory at 10 years and 100,000 respondents: Reliability and validity of a teacher self-report inventory. *Adult Education Quarterly*, *61*(4), 358–375. doi:10.1177/0741713610392763
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education.
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.
- Herren, R. V., & Edwards, M. C. (2002). Whence we came: The land-grant tradition origin, evolution, and implications for the 21st century. *Journal of Agricultural Education*, 43(4), 88–98. doi:10.5032/jae.2002.04088
- Kane, R., Sandretto, S., & Heath, C. (2004). An investigation into excellent tertiary teaching: Emphasizing reflective practice. *Higher Education*, 47(3), 283–310. doi:10.1023/B:HIGH.0000016442.55338.24
- Kelly, W. (1987). *Pogo: We have met the enemy and he is us* (2nd ed.). New York, NY: Simon & Schuster.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. New York, NY: Cambridge.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Matofari, F. N. (2014). A path analysis study of the influence of teaching perspectives and perceptions of job burnout on instructor turnover intentions at Oklahoma State University (Unpublished doctoral dissertation). Oklahoma State University, Stillwater. Retrieved from https://shareok.org/handle/11244/14989
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Moehl, P. J. (2011). Exploring the relationship between Myers-Briggs Type and instructional perspectives among college faculty across academic disciplines. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3466530)
- National Research Council. (2009). *Transforming agricultural education for a changing world*. Washington, DC: The National Academies Press.
- Pratt, D. D. (1992). Conceptions of teaching. *Adult Education Quarterly*, 42(4), 203–220. doi:10.1177/074171369204200401

- Pratt, D. D., & Collins, J. B. (n.d.). *What are the 5 perspectives*? Retrieved from http://www.teachingperspectives.com/tpi/
- Pratt, D. D., Collins, J. B., & Jarvis-Selinger, S. (2001, April). Development and use of the Teaching Perspectives Inventory (TPI). Paper presented at the 2001 Annual Conference of the American Educational Research Association, Seattle, WA.
- Rosenshine, B., & Furst, N. (1971). Research on teacher performance criteria. In B. O. Smith (Ed.), *Research in teacher education A symposium* (pp. 37–72). Englewood Cliffs, NJ: Prentice Hall.

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