Training: Psyc. 638

Spring, 2006
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PURPOSE: This course will provide you with a survey of research and perspectives on training in organizations. Our emphasis will be on understanding the principles and techniques of training. This class will follow a seminar format. This means that you should read the assigned articles before class time and be prepared to discuss/critique them. From this course, students should gain in their abilities to read, critique, and discuss major research perspective and ideas in the training literature. You will also gain in your abilities to apply training techniques, and develop research proposals that can contribute to the training literature.

OUTLINE OF TOPICS:

I.	Training: An introduction – (1/24-31)	
II.	Learning theories – (1/31-2/7)	
III.	Training needs assessment – (2/14)	
IV	Instructional design – (2/21-28)	
V	Practice, feedback, and information provision – (3/7-21)	
VI	Trainee characteristics – (3/21-28)	
VII	Training transfer – (3/28-4/4)	
VIII	Training evaluation – (4/11)	
IX	The organizational context – (4/18)	
X	Developmental work assignments – (4/18-4/25)	
XI	Managerial training and development – (4/25-5/2)	

REQUIREMENTS: Your grade in this class will be based on three individual and team assignments. The first assignment will be a team project that will entail a training needs analysis and training intervention prospectus for a particular organization. An outline of the proposal will be due March 21st. The final assignment will be due April 25th. The second assignment will be a research proposal on any topic in training. An outline of the proposal will be due March 28th. The final paper will be due May 2.   The third assignment will be a cumulative final examination. This examination will also be take-home essay in format. The final examination will be distributed on May 2. The final examination will each be worth 30% of your final grade. The training proposal will also be worth 40%, and the research proposal will be worth 30% of your grade. Missed deadlines for the assignments will result in a letter-grade deduction (10 points) for each day late.

TEXT:

Goldstein, I. L., & Ford, J. K. (2002). *Training in Organizations* (4th edition). Belmont, CA: Wadsworth.

Honor Code: The provisions of the George Mason University honor code apply to all aspects of this course.

Add/Drop Deadlines: Add = Feb 7; Drop = Feb 24.

If you are a student with a disability and you need academic accommodations, please see me and contact the

Disability Resource Office (703-993-2474). All student accommodations must be arranged through that office

ASSIGNED READINGS

I.   Training: An introduction and overview

Campbell, J. P., & Kuncel, N. R. (2001). Individual and team training. In N. Anderson, D. S. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of Industrial, Work, and Organizational Psychology* (Vol. 1, pp. 278-312). London: Sage.

Ford, K. J. (1997). Advances in training research and practice: An historical perspective. In K. Ford, S.W.J. Kozlowski, K. Kraiger, E. Salas, & M. S. Teachout (Eds.), *Improving training effectiveness in work organizations*. Mahwah, NJ: Erlbaum.

Goldstein, I. L., & Gilliam, P. (1990). Training system issues in the year 2000. *American Psychologist, 45*, 134-145.

Saari, L. M., Johnson, T. R., McLaughlin, S. D., & Zimmerle, D. M. (1988). A survey of management training and education practices in U. S. companies. *Personnel Psychology, 41*, 731-743.

Goldstein & Ford (2002). Chapters 1-2

II.   Learning theories

Ackerman, P. L. (1987). Individual differences in skill learning: An integration of psychometric and information processing perspectives. *Psychological Bulletin, 102*, 3-27.

Gagne, R. M. (1995/6). Learning processes and instruction. *Training Research Journal, 1*, 17-28.

Glaser, R (1990). The reemergence of learning theory within instructional research. *American Psychologist, 45*, 29-39.

Howell, W. C., & Cooke, N. J. (1989). Training the human information processor: A review of cognitive models. In I. L. Goldstein & Associates (Eds), *Training and development in organizations*. San Francisco, CA: Jossey-Bass.

Kanfer, R., & Ackerman, P.L. (1989). Motivational and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. *Journal of Applied Psychology, 74*, 657-690.

III.   Training needs assessment

Ford, J. K., Smith, E. M., Sego, D. J., & Quinones, M. A. (1993). Impact of task experience and individual factors on training emphasis ratings. *Journal of Applied Psychology, 78*, 583-590.

Ostroff, C., & Ford, J. K. (1989). Assessing training needs: Critical levels of analysis. In I. L. Goldstein & Associates (Eds), *Training and development in organizations*. San Francisco, CA: Jossey-Bass.

Schneider, C. E., Guthrie, J. P., & Olian, J. D. (1988). A practical guide to conducting and using training needs assessment. *Public Personnel Management* (Summer, 1988), 191-205.

Steadman, S. V. (1980). Learning to select a needs assessment strategy. *Training and Development Journal*, 56-61.

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IV   Training design

Arthur, W., Day, E. A., Bennett, W., McNelly, T., & Jordan, J. A. (1997). Dyadic vrs. Individual training protocols: Loss and reacquisition of a complex skill. *Journal of Applied Psychology, 82*, 783-791.

Campbell, J. (1988). Training design for performance improvement. In J. P. Campbell & R. J. Campbell & Assoc. (Eds), *Productivity in organizations*. San Francisco: Jossey-Bass.

Davis, F. D., & Yi, M. Y. (2004). Improving computer skill training: Behavior modeling, symbolic mental rehearsal, and the role of knowledge structures. *Journal of Applied Psychology, 89*, 509-523.

Keith, N., & Frese, M. (2005). Self-regulation in error management training: Emotion control and metacognition as mediators of performance effects. *Journal of Applied Psychology, 90*, 677-691.

Smith, E., Ford, J. K., & Kozlowski, S. W. J. (1997). Building adaptive expertise: Implications for training design. In M. A. Quinones & A. Ehrenstein (Eds.), *Training for a rapidly changing workplace: Applications of psychological research*. Washington, DC: American Psychological Association.

Taylor, P., Russ-Eft, D. F., & Chan, D. W. L., A meta-analytical review of behavior modeling training. *Journal of Applied Psychology, 90*, 692-709.

Thornton, G.C., & Cleveland, J. N. (1990). Developing managerial talent through simulation. *American Psychologist, 45*, 190-199.

Goldstein & Ford (2002). Chapters 4, 7

V   Practice, Feedback and information provision

Donovan, J. J., & Radosevich, D. J. (1999). A meta-analytic review of the distribution of practice effect: Now you can see it, now you don't. *Journal of Applied Psychology, 84*, 795-805.

Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist, 49*, 725-747.

Goodman, J. S., & Wood, R. E. (2004). Feedback specificity, learning opportunities, and learning. *Journal of Applied Psychology, 89*, 809-821.

Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*, 254-284.

Ilgen, D. R., Fisher, C. D., & Taylor, M. S. (1979). Consequences of individual feedback on behavior in organizations. *Journal of Applied Psychology, 64*, 349-371.

Schmidt, R. A., & Wulf, G. (1997). Continuous concurrent feedback degrades skill learning: Implications for training and simulation. *Human Factors, 39*, 509-525.

Yeo, G. B., & Neal, A. (2004). A multilevel analysis of effort, practice, and performance: Effects of ability, conscientiousness, and goal orientation. *Journal of Applied Psychology, 89*, 231-247.

VI. Trainee characteristics

Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytical path analysis of 20 years of research. *Journal of Applied Psychology, 85*, 678-707.

Colquitt, J. A., Simmering, M. J. (1998). Conscientiousness, goal orientation, and motivation to learn during the learning process: A longitudinal study. *Journal of Applied Psychology, 83*(4), 654-665.

Ford, J. K., Smith, E. M., Weissbein, D., Gully, S., & Salas, E. (1998). Relationships of goal orientation, metacognitive activity, and practice strategies with learning outcomes and transfer. *Journal of Applied Psychology, 83*, 218-232.

Gully, S. M., Payne, S.C., Koles, K. L., & Whiteman, J. K., (2002). The impact of error training and individual differences on training outcomes: An attribute-treatment interaction perspective. *Journal of Applied Psychology, 87(1),* 143-155.

Noe, R. A., & Schmitt, N (1986). The influence of trainee attitudes on training effectiveness: Test of a model. *Personnel Psychology, 39*, 497-523.

Snow, R. E. (1989). Aptitude-treatment interaction as a framework for research on individual differences in learning. In P.L. Ackerman, R. J. Sternberg, & R. Glaser (Eds.), *Learning and individual differences: Advances in theory and research* (pp. 13-59). New York: Freeman & Co.

Snow, R. E. & Lohman, D. F. (1984). Toward a theory of cognitive aptitude for learning from instruction. *Journal of Educational Psychology, 76*, 347-376.

Goldstein & Ford (2002). Chapters 1-2

VII Training transfer

Baldwin, T. P., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology, 41*, 63-105.

Burke, L. A., & Baldwin, T. P (1999). Workforce training transfer: A study of the effect relapse prevention training and transfer climate. *Human Resource Management, 38*, 227-242.

Chen, G., Thomas, B., & Wallace, J. C. (2005). A multilevel examination of the relationships among training outcomes, mediating regulatory processes and adaptive performance. *Journal of Applied Psychology, 90*, 827-841.

Ford, J. K., & Weissbein, D. (1997). Transfer of training: An updated review and analysis. *Performance Improvement Quarterly, 10*, 2-41

Gist, M., Bavetta, A., & Stevens, C. (1990). Transfer training method: Its influence on skill

generalization, skill repetition, and performance level. *Personnel Psychology, 43*, 501-523.

Holladay, C. L., & Quinones, M. A., (2003). Practice variability and transfer of training: The role of self-efficacy generality. *Journal of Applied Psychology, 88,* 1094-1103.

Wexley, K. & Baldwin, T. (1986). Post-training strategies for facilitating positive transfer: An empirical exploration. *Academy of Management Journal, 29*, 503-520.

VIII   Training evaluation

Alliger, G. M., & Janek, E. A. (1989). Kirkpatrick's levels of training criteria: Thirty years later. *Personnel Psychology, 42*, 331-342.

Arthur, W. Jr., Bennett, W. Jr., Edens, P. S., Bell, S. T. (2003) Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychology. 88,*234-245.

Brown, K. G. (2005). An examination of the structure and nomological network of trainee reactions: A closer look at "smile sheets." *Journal of Applied Psychology, 90*, 991-1001.

Ford, J. K., & Wroten, S. P. (1984). Introducing new methods for conducting training evaluation and for linking training evaluation to program redesign. *Personnel Psychology, 37*, 651-665.

Kraiger, K., Ford, J. K., & Salas, E., (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training evaluation. *Journal of Applied Psychology, 78*, 311-328.

Kraiger, K., Salas, E., & Cannon-Bowers, J. A. (1995). Measuring knowledge organization as a method of assessing learning during training. *Human Factors, 37*, 804-816.

Morrow, C. C., Jarrett, M. Q., & Rubinski, M. T. (1997). An investigation of the effect and economic utility of corporate-wide training. *Personnel Psychology, 50*, 91-119.

Goldstein & Ford (2002). Chapters 5,6

IX   The organizational context

Jackson, S. E., Schuler, R. S., & Rivero, J. C. (1989). Organizational characteristics as predictors of personnel practices. *Personnel Psychology, 42*, 727-786.

Quinones, M. A (1997). Contextual influences on training effectiveness. In M. A. Quinones & A. Ehrenstein (Eds.), *Training for a rapidly changing workplace: Applications of psychological research*. Washington, DC: American Psychological Association.

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X.   Developmental work assignments and self-development

Birdi, K., Allan, C., & Warr, P. (1997). Correlates and perceived outcomes of four types of employee development activity. *Journal of Applied Psychology, 82(6),* 845-857.

London, M. & Mone, E. M. (1999). Continuous learning. In D. Ilgen & E. Pulakos (Eds). *The

changing nature of performance. . San Francisco, CA: Jossey-Bass.

Manz, C. C., & Manz, K. P. (1991). Strategies for facilitating self-directed learning: A process for enhancing human resource development. *Human Resource Development Quarterly, 2,* 3-12.

Maurer, T. J., & Tarulli, B. A. (1994). Investigation of perceived environment, perceived outcome, and person variables in relationship to voluntary development activity by employees. *Journal of Applied Psychology, 79*, 3-14.

Maurer, T.J., Weiss, E. M, Barbeite, F. G., (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology. 88(4):707-724, August 2003.*

McCauley, C.D., Ruderman, M.N., Ohlott, P.J., & Morrow, J.E. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology, 37*, 46-67.

XI   Managerial training and development; team training

Burke, M. J., & Day, R. R. (1986). A cumulative study of the effectiveness of managerial training. *Journal of Applied Psychology, 71*, 242-245.

Ellis, A., Bell, B. S., Ployhart, R. E., Hollenbeck, J. R., & Ilgen, D. R. (2005). An evaluation of generic teamwork skills training with action teams: Effects on cognitive and skill-based outcomes. *Personnel Psychology. 58*, 641-672.

Kozlowski, S. W. J., Gully, S. M., Salas, E., & Cannon-Bowers, J. A. (1996). Team leadership and development: Theory, principles, and guidelines for training leaders and teams. In M. M. Beyerlein, D. Johnson, & S. T. Beyerlein (Eds.), *Interdisciplinary studies of work teams (Vol. 3: Team Leadership)*. Greenwich,

Salas, E., Burke, C. S. & Stagl, K. C. (2004). Developing teams and team leaders: Strategies and principles. In D. Day, S. J. Zaccaro, & S. M. Halpin (Eds.), *Leader development for transforming organizations: Growing Leaders for Tomorrow* (pp. 325-355). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Serfaty, D., Entin, E. E., & Johnston, J. H. (1998). Team coordination training. In J. A. Cannon-Bowers & E. Salas (Eds), *Decision making under stress: Implications for training and simulation* (pp. 221-245). Washington, DC: American Psychological Association.

Van Velsor E., & McCauley, C. D. (2004). *Our view of leadership development*. In C. D. McCauley, & E. Van Velsor (Eds.), Handbook of Leadership Development (2nd Ed.). San Francisco, CA: Jossey-Bass.

Goldstein & Ford (2002). Chapter 8