

## 7 Literature

- Aaron F., & Harrington, D. M. (1981). Creativity, intelligence, and personality. *Annual Review of Psychology*, 32, 439-76.
- Argyris, C., & Schön, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison Wesley.
- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behaviour and Human Performance*, 4, 142-75.
- Amabile, T. M. (1983). *The social psychology of creativity*. New York, NY: Springer.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behaviour*, 10, 123-67.
- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40, 39-58 .
- Amabile, T. M. (1999). How to kill creativity. In T. Amabile, D. Leonard, J. Rayport, E. Morley, A. Silver, W. Suzy, & P. F. Drucker (eds.), *Harvard Business Review on Breakthrough Thinking*, (pp. 1-28). Boston, MA: Harvard Business School Press.
- Anderson, J. R. (1982). Acquisition of cognitive skill. *Psychological Review*, 89, 369-406.
- Bauer, J., & Gruber, H. (2007). Workplace changes and workplace learning: Advantages of an educational micro perspective. *Journal of Lifelong Education*, 26, 675-88.
- Bauer, J., & Rehr M. (2005). How to assess learning culture: A motivational approach. In H. Gruber, C. Harteis, R. H. Mulder, & M. Rehr (eds), *Bridging individual, organisational, and cultural aspects on professional learning*, (pp. 371-76). Regensburg: Roderer.
- Becker, M. C. (2004). Organizational routines: A review of the literature. *Industrial and Corporate Change*, 13, 643-77.
- Bella, D. C., Belli-McQueen, B; & Haider, A. (2007). Partner naming and forgetting: Recall of network members. *Social Networks*, 29, 279-99.
- Bernard, H. R. (2005). Review of Linton C. Freeman. The development of social network analysis: A study in the sociology of science. *Social Networks*, 27, 377-84.

- Bian, Y. (1997). Bringing strong ties back in: Indirect ties, network bridges, and job searches in China. *American Sociological Review*, 62, 366-85.
- Bierhoff, H. W., & Müller, G. F. (1993). Cooperation in organizations. *Zeitschrift für Arbeits- und Organisationspsychologie*, 37, 42-51.
- Billet, S. (2001). Knowing in practice: Re-conceptualising vocational expertise. *Learning and Instruction*, 11, 431-52.
- Björk, J., & Magnusson, M. (2009). Where Do Good Innovation Ideas Come From? Exploring the Influence of Network Connectivity on Innovation Idea Quality. *Journal of Product Innovation Management*, 26 (6), 662-70.
- Blanning, R. W., & King, D. R. (1995). *Organizational intelligence. AI in organizational design, modelling, and control*. Los Alamitos, CA: IEEE Computer Society Press.
- Bloomberg, K. (2002). Original, copy and coffee cup. In B. von Oetinger & H. von Pierer (eds), *A passion for ideas: how innovations create the new and shape our world* (pp. 61-64). West Lafayette, IN: Purdue University Press.
- Boeddrich, H.-J. (2004). Ideas in the Workplace: A New Approach Towards Organizing the Fuzzy Front End of the Innovation Process. *Creativity and Innovation Management*, 13 (4), 274-85.
- Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). *Ucinet 6 for Windows*. Harvard: Analytic Technologies.
- Bortz, J., & Döring, N. (1995). *Forschungsmethoden und Evaluation für Sozialwissenschaftler* [Research methods and evaluation for researcher in social science]. Berlin: Springer Verlag.
- Boshuizen, H. P. A., Bromme, R., & Gruber, H. (2004). Professional learning: Gaps and transitions on the way from novice to expert. Dordrecht: Kluwer.
- Boshuizen, H. P. A., & Schmidt H. G. (1992). On the role of biomedical knowledge in clinical reasoning by experts, intermediates and novices. *Cognitive Science*, 16, 164-84.
- Bouty, I. (2000). Interpersonal and interaction influences on informal resource exchange between R&D researchers across organizational boundaries. *Academy of Management Journal*, 43, 50-65.
- Brass, D. J. (1984). Being in the right place: A structural analysis of individual influence in an organization. *Administrative Science Quarterly*, 29, 518-39.
- Brass, D. J. (1995). Creativity: It's all in your social network. In C. M. Ford & D. A. Gioia (eds), *Creative action in organizations* (pp. 94-99). Thousand Oaks, CA: Sage.
- Brosius, F. (2004). SPSS 12. *Das mitp-Standardwerk*. [The mitp-standardbook]. Bonn: mitp Verlag.
- Brewer, D. D. (2000). Forgetting in the recall-based elicitation of personal and social networks. *Social Networks*, 22, 29-43.

- Brusoni, S., Prencipe, A., & Pavitt, K. (2001). Knowledge specialization, organizational coupling, and the boundaries of the firm: Why do firms know more than they make? *Administrative Science Quarterly*, 46, 597-622.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.
- Brown, J.S. & Duguid, P. (1991). Organizational Learning and Communities of practice. *Organization Science*, 2 (1), 40-57.
- Burt, R. S. (1991). *Structure, Vol. 4,2*. New York, NY: Columbia University.
- Burt, R. S. (1992). *Structural holes*. Cambridge, MA: Harvard University Press.
- Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, 42, 339-65.
- Burt, R.S. (2004). Structural Holes and Good Ideas. *American Journal of Sociology*, 110 (2), 349-99.
- Cancian, F. (1967). Stratification and risk-taking: A theory tested on agricultural innovation. *American Sociological-Review*, 33, 921-27.
- Cashdan, S., & Welsh, G. S. (1966). Personality correlates of creative potential in talented high school students. *Journal of Personality*, 34, 445-55.
- Chen, M-H., & Kaufmann, G. (2008). Employee Creativity and R&D: A Critical Review. *Creativity and Innovation Management*, 17 (1), 71-76.
- Choi, H-S, & Thompson, L. (2005). Old wine in a new bottle: Impact of membership change on group creativity. *Organizational Behavior and Human Decision Processes*, 98 (2), 121-32.
- Coser, R. (1975). The complexity of roles as a seedbed of individual autonomy. In L. Coser (Ed.), *The idea of social structure: Papers in honor of Robert K Mertin* (pp. 237-63). New York, NY: Harcourt Brace.
- Crosby, A. C. (1968). *Creativity and performance in industrial organisations*. London: Tavistock Publications.
- Csikszentmihalyi, M. (1996). *Creativity, flow and the psychology of discovery and invention*. New York, NY: Harper-Collins.
- Csikszentmihalyi, M. (2001). A systems perspective on creativity. In J. Henry (ed.), *Creative Management* (2nd edn) (pp. 11-26). London: Sage Publications.
- De Bono (1973). *Lateral Thinking*. Harmondsworth: Penguin Books.
- De Charms, R. (1968). *Personal causation: The internal affective determinants of behaviour*. New York, NY: Academic Press.
- Deci, E. L. (1975). *Intrinsic motivation*. New York, NY: Harper.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, 62, 119-42.

- Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research*, 71, 1-27.
- Deci, E. L., & Ryan, R. M. (1993). Die Selbstbestimmungstheorie der Motivation und Ihre Bedeutung für die Pädagogik [The self-determination theory of motivation and its relevance to pedagogy]. *Zeitschrift für Pädagogik*, 39, 223-38.
- De Zeeuw, G. (1992). Soft knowledge accumulation, on the rise of competence. *Systems Practice*, 5, 192-223.
- Ellström, P. E. (2001). Integrating learning and work: problem and prospects. *Human Resource Development Quarterly*, 12, 421-35.
- Engström, Y., Engström, R., & Kärkkäinen, M. (1995). Polycontextuality and boundary crossing in expert cognition: Learning and problem solving in complex work activities. *Learning and Instruction*, 5, 319-36.
- Engström, Y. (2004). The new generation of expertise: seven theses. In H. Rainbird, A. Fuller, & A. Munro (eds), *Workplace learning in context* (pp. 145-65). London: Routledge.
- Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, 70, 113-36.
- Erpenbeck, J., & Heyse, V. (1997). *Der Sprung über die Kompetenzbarriere: Kommunikation, selbstorganisiertes Lernen und Kompetenzentwicklung von und in Unternehmen* [The jump over the competence barrier: communication, self organized learning and competence development of and in organizations]. Bielefeld: Bertelsmann Verlag.
- Erpenbeck, J., & Heyse, V. (1999). *Die Kompetenzbiographie: Strategien der Kompetenzentwicklung durch selbstorganisiertes Lernen und multimediale Kommunikation* [The competence biography: strategies of competence development by self organized learning and multimedia communication]. Münster: Waxmann.
- Fank, M. (2002). Knowledge-Management in der Praxis: Aktivierung der Mitarbeiter im Rahmen von Knowledge-Management [Knowledge-Management in practice: Activation of employees in the context of knowledge management]. Köln: Institut für e-Management e.V.
- Frank, K. (1996). Mapping interactions within and between cohesive subgroups. *Social Networks*, 18, 93-119.
- Feldman, D. H. (1999). The development of creativity. In J. Sternberg (ed.), *Handbook of Creativity* (pp. 169-86). New York, NY: Cambridge University Press.
- Freeman, L C (1979). Centrality in social networks: Conceptual clarification. *Social Networks*, 1, 215-39.

- Freeman, L. C. (2004). *The development of social network analysis: A study in the sociology of science*. Vancouver, BC: Empirical Press.
- Frey, B. S., & Osterloh, M. (2000): *Managing motivation*. Wiesbaden: Gabler.
- Garcia-Lorenzo, L., Mitleton-Kelly, E., & Galliers, R. D. (2003). *Organizational complexity: Organising through the generation and sharing of knowledge. Knowledge, organizations and development, Network (KODE)* [Working Paper Series (3)]. London: London School of Economics.
- Gardiner, P. (1999). Soaring to new heights with learning oriented companies. *Journal of Workplace Learning*, 11, 255-65.
- Gephart, R. P. (2002). Introduction to the brave new workplace: organizational behaviour in the electronic age. *Journal of Organizational Behaviour*, 23, 327-44.
- Gersick, C. J. G., & Hackman, J. R. (1990). Habitual routines in task-performance groups. *Organizational Behavior and Human Decision Processes*, 47, 65-97.
- Getzels, J. W., & Csikszentmihalyi, M. (1976). *The creative vision: A longitudinal study of problem-finding in art*. New York, NY: Wiley-Interscience.
- Gogatz, A., & Mongejar, R. (2005). *Business creativity, breaking the invisible barriers*. New York, NY: Palgrave Macmillan.
- Glynn, M. A. (1996). Innovative genius: A framework for relating individual and organizational intelligences to innovation. *Academy of Management Review*, 21, 1112-42.
- Granovetter, M. S. (1973). The strength of weak ties. *The American Journal of Sociology*, 78, 1360-80.
- Granovetter, M. S. (1974). *Getting a job, a study of contacts and careers*. Cambridge, MA: Harvard University Press.
- Granovetter, M. S. (1982). The strength of weak ties. A network theory revisited. In P. V. Marsden & N. Lin (eds), *Social structure and network analysis* (pp. 105-130). Beverly Hills, CA: Sage.
- Gruber, H. (1999). *Erfahrungen als Grundlage kompetenten Handelns* [Experience as basis for competent action], Bern: Huber.
- Gruber, H., Palonen, T., Rehrl, M., & Lehtinen, E. (2007). Understanding the nature of expertise: Individual knowledge, social resources and cultural context. In H. Gruber & T. Palonen (eds), *Learning in the workplace - new developments* (pp. 171-88). Turku: Finnish Educational Research Association (FERA).
- Haeckel, S. H. (1999). *Adaptive enterprise – creating leading sense and response organizations*. Cambridge, MA: Harvard Business School Press.
- Hager, P. (2004). Lifelong learning in the workplace? Challenges and issues. *Journal of Workplace Learning*, 16, 22-32.

- Hansen, T. (1999). The search transfer problem: The role of weak ties in sharing knowledge across organizational sub-units. *Administrative Science Quarterly*, 44, 82-102.
- Harteis, C., Bauer, J., Festner, D., Gruber, H., & Heid, H. (2005). Self-determination in daily working life. In H. Gruber, C. Harteis, R. H. Mulder & M. Rehr (eds), *Bridging individual, organisational, and cultural perspectives on professional learning* (pp. 244-52). Regensburg: Roderer.
- Hausman, C. R. (1987). Philosophical perspectives on the study of creativity. In S. G. Isaksen (ed.), *Frontiers of creativity research, beyond the basics* (pp. 380-389). Buffalo, NY: Bearly Limited.
- Heckhausen, H. (1989): *Motivation und Handeln*. Berlin: Springer.
- Hennessey, B. A., & Amabile, T. M. (1988). The conditions of creativity. In: R. J. Sternberg (Ed.), *The nature of creativity* (pp. 11-38). Cambridge: Cambridge University Press.
- Hennessey, B. A., & Amabile, T. M. (1999). Consensual assessment. In M. A. Runco (ed.), *Encyclopedia of creativity* (pp. 347-59). San Diego, CA: Academic Press.
- Henry, J. (2001). *Creative management* (2nd edn). London: Sage Publications.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959): *The motivation to work*. New York, NY: Wiley.
- Hilthred, P., & Kimble, C. (2004). *Knowledge networks: Innovation through communities of practice*. Hershey: Idea Group Publishing.
- Hoeve, A., & Nieuwenhuis, L. F. M. (2006): Learning routines in innovation processes. *Journal of Workplace Learning*, 18, 171-85.
- Hofstete, G. (2001). *Lokales Denken, globales Handeln. Interkulturelle Zusammenarbeit und globales Management* (2nd edn), [Local thinking, global action. Intercultural cooperation and global management]. Munich: Deutscher Taschenbuch Verlag.
- Howells, J.R.L. (2002). Tacit Knowledge, Innovation and Economic Geography. *Urban Studies Journal Limited*, 39 (5-6), 871-84.
- Humphreys, P. C. (1998). Discourses underpinning decision support. In D. Berkeley, G. Widmeyer, P. Brezillon & V. Rajkovic (eds), *Context sensitive support systems* (pp. 1-23). London: Chapman & Hall.
- Humphreys, P. C., & Jones, G. (2006). The evolution of group decision support systems to enable collaborative authored outcomes. *Journal of General Evolution*, 62, 193-222.
- Humphreys, P. C.; Lorac, C., & Ramella, M. (2001). Creative support for innovative decisions. *Journal of Decision Systems*, 10, 241-63.
- Ibarra, H. (1992). Homophily and differential returns: Sex differences in a network structure and access in an advertising firm. *Administrative Science Quarterly*, 37, 422-47.
- Ibarra, H., & Andrews, S. B. (1993). Power, social influence, and sense making: Effects of network centrality and proximity on employee perceptions. *Administrative Science Quarterly*, 38, 277-303 .

- Isaksen, S. G., Lauer, K. J., & Ekvall, G. (1999). Situational outlook questionnaire: A measure of the climate for creativity and change. *Psychological Reports, 85*, 665-74.
- Janszen, F. (2000). *The Age of innovation: Making business creativity a competence, not a coincidence*. London: Pearson Education Limited.
- Järvinen, A., & Poikela, E. (2001). Modeling reflective and contextual learning at work. *Journal of Workplace Learning, 13*, 282-89.
- Jones, G., & Lyden-Cowan, C. (2002). The Bridge: Activating potent decision making in organizations. In F. Adam, P. Brezillon, P. Humphreys, & J-C Pomerol (Eds). *Decision Making and Decision Support in the Internet Age* (pp. 3-14). Cork, Ireland: Oaktree Press.
- Jovchelovitch, S. (2001). Social representations, public life and social construction. In: K. Deaux, & G. Philogene (Eds). *Representations of the social: bridging theoretical traditions* (pp. 165-82). Oxford: Blackwell.
- Kao, J. (2002). The virtues of corporate disorder. In B. von Oetinger & H. von Pierer (eds), *A passion for ideas: how innovations create the new and shape our world* (pp. 109-23). West Lafayette, IN: Purdue University Press.
- Kanter, R. M. (1983). *The change masters: Innovation for productivity in the American Cooperation*. New York, NY: Simon and Schuster.
- Kanter, R. M. (1988). When a thousand flowers bloom, structural, collective, and social conditions for innovation in organizations. *Research in Organizational Behaviour, 10*, 169-211.
- Kaufmann, G. (1993). The logical structure of creativity concepts: A conceptual argument for creativity as a coherent discipline. In S. G. Isaksen & M. C. Murdock (eds), *Understanding and recognizing creativity: The emergence of a discipline* (pp. 141-57). New Jersey, NJ: Ablex Publishing Corporation.
- Kehr, H. M. (2004). *Motivation und volition*. Göttingen: Hogrefe.
- Kelly, T., & Littman, J. (2001). *The art of innovation*. London: Harper Collins Business.
- Kogovsek, T., & Ferligoj, A. (2005). Effects on reliability and validity of egocentered network measurements. *Social Networks, 27*, 205-29.
- Krackhardt, D. (1990). Assessing the political landscape: Structure, cognition, and power in organizations. *Administrative Science Quarterly, 35*, 342-69.
- Krackhardt, D. (1992). The strength of strong ties: The importance of philos in organizations. In N. Nohria & R. C. Eccles (eds), *Networks and organizations: Structure, form, and action* (pp. 216-39). Cambridge, MA: Harvard University Press.
- Labinaca, G., Brass, D. J., & Gray, B. (1988). Social networks and perceptions of intergroup conflict, the role of negative relationships and third parties. *Academy of Management Journal, 41*, 55-67.

- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Laumann, E. O., Marsden, P. V., & Orensky, D. (1983). The boundary specification problem in network analysis. In R. S. Burt & M. J. Minor (eds), *Applied network analysis* (pp. 18-34). Beverly Hills, CA: Sage.
- Lehtinen, E., Hakkarainen, K., & Palonen, T. (2004). Organizational learning and expert networks. In H. Gruber, C. Harteis, H. Heid, & B. Meier (eds), *Capital and competence. Changes in work life and its impact from a education perspective* (pp. 199-224). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Leonard, D., & Straus, S. (1999). Putting your company's whole brain to work. In T. Amabile, D. Leonard, J. Rayport, E. Morley, A. Silver, W. Suzy, & P. F. Drucker (eds), *Harvard Business Review on Breakthrough Thinking*, (pp.57-86). Boston, MA: Harvard Business School Press.
- Lin, N., Ensel, W. M., & Vaughn, J. C. (1981). Social resources and strength of ties: Structural factors in occupational status attainment. *American Sociological Review*, 46, 393-403.
- Lincoln, J. R., & Miller, J. (1979). Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly*, 24, 181-99.
- Love, J. A. (2001). Patterns of networking in the innovation process: A comparative study of the UK, Germany and Ireland. In O. Jones, S. Conway & F. Steward (eds). *Social interaction and organizational change, Aston perspective on innovation networks. Series of technology management*, Vol. 6. London: Imperial College Press.
- MacKinnon, D. W. (1965). Personality and the realization of creative potential. *American Psychologist*, 20, 273-81.
- March, J. G. (1999). *The pursuit of organisational intelligence*. Oxford: Blackwell Business.
- Maslow, A. H. (1977). *Motivation und Persönlichkeit*. Olten: Walter-Verlag AG.
- McAuley, E., Duncan, T., & Tammen, V. V. (1987). Psychometric properties of the intrinsic motivation inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 60, 48-58.
- Morgan, G. (1996). *Images of organization*. Thousand Oaks, CA: Sage Publications.
- Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, 103, 27-43.
- Morley, E., & Silver A. (1999). A film directors approach to managing creativity. In T. Amabile, D. Leonard, J. Rayport, E. Morley, A. Silver, W. Suzy, & P. F. Drucker (eds), *Harvard Business Review on Breakthrough Thinking*, 87-116. Boston: Harvard Business School Press.



- Nappelbaum, E. L. (1997). Systems logic for problem formulation and choice. In P. Humphreys, S. Ayestaran, A. McCosh, & B. Mayon-White (eds), *Decision support in organizational transformation* (pp. 256-269). London: Chapman & Hall.
- Nelson, R. E. (1989). The strength of strong ties, social networks and intergroup conflict in organizations. *Academy of Management Journal*, 32, 377- 401.
- Nonaka, I., & Takeuchi H. (1995). *The Knowledge Creating Company*. New York, NY: Oxford University Press.
- North, K. (2002). *Wissensorientierte Unternehmensführung: Wertschöpfung durch Wissen* (3rd edn) [Knowledge oriented organisational leadership: Value creation through knowledge]. Wiesbaden: Gabler.
- Orton, J., & Weick, K. (1990). Loosely coupled systems: A reconceptualization. *Academy of Management Journal*, 15, 203-23.
- Osborn, A. (1963). *Applied imagination - principles and procedures of creative problem solving*. London: Charles Scribner's Sons.
- Palonen, T. (2003). *Shared knowledge and the web of relations*. Turku: University of Turku.
- Palonen, T., Hakkarainen, K., Talvitie, J., & Lehtinen, E. (2004). Network ties, cognitive centrality and team interaction within a telecommunication company. In H. P. A. Boshuizen, R. Bromme, & H. Gruber (eds), *Professional development, gaps and transitions on the way from novice to expert* (pp. 273-94). Dordrecht: Kluwer.
- Palonen, T., & Lehtinen, E. (2001). Exploring invisible scientific communities: Studying networking relations within an educational research community. A Finnish Case. *Higher Education*, 42, 493-513.
- Pekrun, R. (1997). Beiläufiges Lernen – nur eine beiläufige Angelegenheit? [Incidental Learning – only an incidental affair?]. In H. Gruber & A. Renkl (eds), *Wege zum Können. Determinanten des Kompetenzerwerbes* (pp. 138-53). Bern: Huber.
- Perry-Smith, J. E., & Shalley, C. E. (2003). The social side of creativity: A static and dynamic social network perspective. *Academy of Management Review*, 28, 89-106.
- Pettigrew, A., & Fenton, E. (2001). *The innovating organization*. London: Sage.
- Plant, R. W., & Ryan, R. M. (1985). Intrinsic motivation and the effects of self-consciousness, self-awareness, and ego-involvement: An investigation of internally-controlling styles. *Journal of Personality*, 53, 435-49.
- Podolny, J. M., & Baron, J. N. (1997). Resources and relationships: Social networks and mobility in the workplace. *American Sociological Review*, 62, 673-93.

- Prenzel, M., Drechsel, B., Kliewe, A., Kramer, K., & Röber, N. (2000). Lernmotivation in der Aus- und Weiterbildung: Merkmale und Bedingungen. [Motivation to learn in further education: Criteria and conditions]. In C. Harteis, H. Heid, & S. Kraft (eds), *Kompendium Weiterbildung. Aspekte und Perspektiven betrieblicher Personal- und Organisationsentwicklung* (pp. 163-73). Opladen: Leske & Budrich.
- Reagans, R., Zuckerman, E., & McEvily, B. (2004). How to Make the Team: Social Networks vs. Demography as Criteria for Designing Effective Teams. *Administrative Science Quarterly*, 49 (1), 101–33.
- Rehrl, M., Palonen, T., & Gruber, H. (2006). Expertise development in science. In H. P. A. Boshuizen (ed.), *Lifelong learning of professionals: Exploring implications of a transitional labour market* (CD-ROM, Proceedings of the 3rd EARLI SIG Learning and Professional Development Conference), Heerlen: Open University of the Netherlands.
- Rickards, T. (1991). Innovation and Creativity: Woods, Trees and Pathways. *R&D Management*, 21, 97-108.
- Root-Bernstein, R., & Root-Bernstein, M. (1999). *Sparks of genius*. New York, NY: Houghton Mifflin.
- Rosenstiel, L. v. (2001). *Motivation im Betrieb* [Motivation in Business]. Leonberg: Rosenberger Fachverlag.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450-61.
- Ryan, R. M., Connell, J. P., & Plant, R. W. (1990). Emotions in non-directed text learning. *Learning and Individual Differences*, 2, 1-17.
- Ryan, R. M., & Deci, E. L. (2004). An overview of self-determination theory: An organismicdialectal perspective: In. E. L. Deci & R. M. Ryan (eds). *Handbook of self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.
- Ryan, R. M., Koestner, R., & Deci, E. L. (1991). Varied forms of persistence: When free-choice behavior is not intrinsically motivated. *Motivation and Emotion*, 15, 185-205.
- Ryan, R. M., Mims, V., & Koestner, R. (1983). Relation of reward contingency and interpersonal context to intrinsic motivation: A review and test using cognitive evaluation theory. *Journal of Personality and Social Psychology*, 45, 736-50.
- Schaffer, S. (1994). Making up discoveries. In M. Boden (ed.). *Dimensions of creativity* (pp. 13—51). Cambridge, MA: MIT Press.
- Schnetzler, N. (2005). *The idea machine: how ideas can be produced industrially*. London: Wiley.
- Scott, J. (1991). *Social network analysis: A handbook*. London: Sage.
- Shah, P. P. (1998). Who are employees' social referents? Using a network perspective to determine referent others. *Academy of Management Journal*, 41, 249—68.

- Simonton, D. K. (1975). Sociocultural context of individual creativity, A transhistorical time-series analysis. *Journal of Personality and Social Psychology*, 32, 1119-33.
- Simonton, D. K. (1977). Creative productivity, age and stress: A biographical time-series analysis of 10 classical composers. *Journal of Personality and Social Psychology*, 35, 791-804.
- Simonton, D. K. (1984). Artistic creativity and interpersonal relationships across and within generations. *Journal of Personality and Social Psychology*, 46, 1273-86.
- Simonton, D. K. (1999). *Origins and genius*. New York, NY: Oxford University Press.
- Sinnot, E. W. (1976). The creativeness of live. In P. E. Vernon (ed.), *Creativity, selected readings* (pp. 107-15). Harmondsworth: Penguin.
- Sonnenburg, S. (2004): Creativity in Communication: A Theoretical Framework for Collaborative Product Creation. *Creativity and Innovation Management*, 13(4), 254-62.
- Stark, R., Mandl, H. , Gruber, H., & Renkel, A. (1998). Indeed, sometimes knowledge does not help: a replication study. *Instructional Science*, 26, 391-407.
- Stein, M. I. (1975). *Stimulating creativity: Group procedures* (Vol. 2). New York, NY: Academic Press.
- Stengel, M. (1997): *Psychology of work*. Weinheim: Beltz.
- Sternberg, R. J. (1985). *Beyond IQ*. Cambridge: Cambridge University Press.
- Sternberg, R. J., Pretz, J. E., & Kaufman, J. C. (2003). Types of innovation. In L. V. Shvinina (ed.), *The international handbook on innovation* (pp. 158-69). Amsterdam: Elsevier Science.
- Tsai, W. (2001). Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance. *Academy of Management Journal*, 44 (5), 996-1004.
- Tsoukas, H. (1996). The firm as a distributed knowledge system: A constructionist approach. *Strategic Management Journal*, 17, 11-25.
- Van Avermaet, E. (1996). Social influence in small groups. In M. Hewstone, W. Stroebe, J. Codol, & G. M. Stephenson (eds). *Introduction to social psychology: A European perspective*. London: Blackwell Publishing.
- Vandervert, L. R. (2003): The neuropsychological basis of innovation. In L. V. Shvinina (ed.). *The International Handbook on Innovation* (pp. 17-30). Amsterdam: Elsevier Science.
- Von Held, F. F. (2004). *Coaching for Consultants*. Unpublished diploma thesis. Institut of management, University of Regensburg, Germany.
- Von Hippel, E. (1978). Successful Industrial Products from Customer Ideas. *Journal of Marketing*, 42 (1), 39-49.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

- Wasserman, S., & Faust, K. (1994). *Social network analysis. Method and applications*. Cambridge: Cambridge University Press.
- Weinert, F. E. (2002). The individual. In B. Von Oetinger & H. Von Pierer (eds). *A passion for ideas: how innovations create the new and shape our world* (p. 191). West Lafayette, IN: Purdue University Press.
- Weik, K. (1995). *Sensemaking in organizations*. London: Sage.
- Welsch, G. S. (1973). Perspectives in the study of creativity. *The Journal of Creative Behaviour*, 7, 231-46.
- Wenger, E. (1998). *Communities of practice, learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wenger, E. & Snyder, W. (2000). Communities of Practice: The Organizational Frontier. *Harvard Business Review*, 78 (1), 139-45.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297-333.
- Winnicott, D. W. (1997). *Playing and reality*. London: Routledge.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18, 293-321.
- Zuckerman, H. (1977). *Scientific elite, Nobel laureates in the U.S.* New York, NY: Elsevier Science.

*BMW Group Sources:*

- BMW Group (2006). *BMW Konzernlagebericht* [Corporate Report]. Munich: BMW Group.
- BMW Group (2006a). *Unternehmenspräsentation* [Corporate Presentation]. Munich: BMW Group.

*Internet Sources:*

- Deci, E. L., & Ryan, R. M. (2007). *Self-determination theory*, October, 2007, <http://www.psych.rochester.edu/SDT/measures/intrins.html>. Accessed 16 March 2009.
- Hanneman, R. A., & Riddle, M. (2005). *Introduction to social network methods*, Riverside, CA: University of California, Riverside. <http://faculty.ucr.edu/~hanneman/> Accessed 16 March 2009.
- Humphreys, P. C., & Jones, G. (2005). *The evolution of group decision support systems to enable collaborative authored outcomes*. [http://www.lml.lse.ac.uk/page2/page22/page32/files/page32\\_3.pdf](http://www.lml.lse.ac.uk/page2/page22/page32/files/page32_3.pdf) Accessed 16 March 2009.

Lloyd, P. (2001). *Creative Space*.

<http://www.gocreate.com/articles/cspace.htm>.

Accessed 16 March 2009.

Mitleton-Kelly, E. (1998). Organizations as complex evolving systems, *complexity research programme*, London: London School of Economics.

[http://www.psych.lse.ac.uk/complexity/PDFfiles/publication/Organization\\_As\\_Complex\\_Evolving\\_Systems.pdf](http://www.psych.lse.ac.uk/complexity/PDFfiles/publication/Organization_As_Complex_Evolving_Systems.pdf).

Accessed 16 March 2009.

*Softonic (2007)*.

<http://spss.softonic.de/>

Accessed 16 March 2009.





*SPSS (2007)*.

<http://www.spss.com/>

Accessed 16 March 2009.

# 8 Appendix

## 8.1 Appendix Idea Card

<b>Workshop Phase</b>		 
<b>Name of the Idea:</b>		
<b>Creator:</b>		
<b>Sketch:</b>		
<b>Short Description:</b>		
Theme description.		
<b>BMW Group</b>	 	

## 8.2 Appendix - Consensual Assessment of Ideas

The tables below show the Consensual Assessment rating of the ideas of every workshop and further indicating the ideas creators. The workshops are indicated in the top left corner. On the left side of the tables are the names of participants and the CAT indicators. At the top of the table are the names of the ideas and the final rankings in the workshops.

CAT Creative V Workshop Actor	Idea Ranking Summ Summ/n	Idea_V	Idea_V	Idea_V	Idea_V	Idea_V	Idea_V	Idea_V	Idea_V	Idea_V	Idea_V_1	Idea_V	Idea_V_1	Idea_V_1	Idea_V_1	Idea_V_1
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
V_1	0,00	0,00														
V_2	0,00	0,00														
V_3	3,75	3,75				3,75										
V_4	11,00	3,67	4,38		3,88			2,75								
V_5	5,50	2,75					2,88									2,63
V_6	7,00	3,50			3,88					3,13						
V_7	8,25	4,13	5,25										3,00			
V_8	0,00	0,00														
V_9	0,00	0,00														
V_10	0,00	0,00														
V_11	0,00	0,00														
V_12	3,63	3,63													3,63	
V_13	4,63	4,63										4,63				
V_14	4,13	4,13					4,13									
V_15	5,63	2,81							2,38		3,25					

Table 61: Ideas CAT Indicator Creativity Workshop V

CAT Creative V Workshop Actor	Idea Ranking Summ Summ/n	Idea_V_1	Idea_V_6	Idea_V_3	Idea_V_4	Idea_V_5	Idea_V_9	Idea_V_7	Idea_V_8	Idea_V_2	Idea_V_10	Idea_V_11	Idea_V_12	Idea_V_13	Idea_V_14	Idea_V_15
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
V_1	0,00	0,00														
V_2	0,00	0,00														
V_3	3,50	3,50				3,50										
V_4	10,42	3,47	4,20		3,75				2,38							
V_5	4,50	2,28					2,13									2,38
V_6	7,00	3,50		3,02						3,08						
V_7	7,46	3,73	4,54											2,92		
V_8	0,00	0,00														
V_9	0,00	0,00														
V_10	0,00	0,00														
V_11	0,00	0,00														
V_12	3,79	3,79													3,79	
V_13	4,25	4,25										4,25				
V_14	3,83	3,83					3,83									
V_15	3,06	2,98							2,75		3,21					

Table 62: Ideas CAT Indicator Creativity, Value, Fit Workshop V

CAT Creative X Workshop Actor	Idea Ranking		Idea_X_1	Idea_X_2	Idea_X_3	Idea_X_4	Idea_X_5	Idea_X_6	Idea_X_7	Idea_X_8	Idea_X_9	Idea_X_10	Idea_X_11	Idea_X_12
	Summ	Summ/n	1	2	3	4	5	6	7	8	9	10	11	12
X_1	6,38	6,38	3,38									3,00		
X_2	0,00	0,00												
X_3	7,13	3,56			3,88	3,25								
X_4	2,88	2,88												2,88
X_5	3,88	3,88					3,88							
X_6	7,88	2,63							2,13	3,00			2,75	
X_7	0,00	0,00												
X_8	3,13	3,13									3,13			
X_9	5,75	2,88		2,13				3,63						

Table 63: Ideas CAT Indicator Creativity Workshop X

CAT Creative X Workshop Actor	Idea Ranking		Idea_X_1	Idea_X_2	Idea_X_3	Idea_X_4	Idea_X_5	Idea_X_6	Idea_X_7	Idea_X_8	Idea_X_9	Idea_X_10	Idea_X_11	Idea_X_12
	Summ	Summ/n	1	2	3	4	5	6	7	8	9	10	11	12
X_1	6,17	6,17	3,58									2,58		
X_2	0,00	0,00												
X_3	6,92	3,46			3,67	3,25								
X_4	2,54	2,54												2,54
X_5	3,42	3,42					3,42							
X_6	8,46	2,82							2,42	3,33			2,71	
X_7	0,00	0,00												
X_8	2,67	2,67									2,67			
X_9	6,13	3,06		2,75				3,38						

Table 64: Ideas CAT Indicator Creativity, Value, Fit Workshop X

CAT Creative B Workshop Actor	Idea Ranking WS		Idea_B_12	Idea_B_10	Idea_B_5	Idea_B_4	Idea_B_3	Idea_B_6	Idea_B_11	Idea_B_8	Idea_B_9	Idea_B_1	Idea_B_2	Idea_B_7	Idea_B_13	Idea_B_14
	Summ	Summ/n	1	2	3	4	5	6	7	8	9	10	11	12	13	14
B_1	5,63	2,81			2,88											2,75
B_2	0,00	0,00														
B_3	0,00	0,00														
B_4	8,50	2,83					2,63			3,00						2,88
B_5	2,75	2,75											2,75			
B_6	5,88	2,94		3,63						2,25						
B_7	0,00	0,00														
B_8	2,00	2,00					2,00									
B_9	0,00	0,00														
B_10	3,13	3,13	3,13													
B_11	5,88	2,94				3,00						2,88				
B_12	0,00	0,00														
B_13	2,50	2,50												2,50		
B_14	0,00	0,00														
Not Defined	3,86	1,93							3,86							

Table 65: Ideas CAT Indicator Creativity Workshop B



CAT Cre+Val+Fit B Workshop Actor	Idea Ranking WS		Idea_B_1	Idea_B_2	Idea_B_3	Idea_B_4	Idea_B_5	Idea_B_6	Idea_B_7	Idea_B_8	Idea_B_9	Idea_B_10	Idea_B_11	Idea_B_12	Idea_B_13	Idea_B_14
	Summ	Summ/n	1	2	3	4	5	6	7	8	9	10	11	12	13	14
B_1	5,33	2,67			3,08											2,25
B_2	0,00	0,00														
B_3	0,00	0,00														
B_4	9,21	3,07						3,04			3,08					3,08
B_5	3,17	3,17												3,17		
B_6	6,50	3,25		3,54						2,96						
B_7	0,00	0,00														
B_8	2,54	2,54					2,54									
B_9	0,00	0,00														
B_10	3,04	3,04	3,04													
B_11	6,50	3,25				2,96							3,54			
B_12	0,00	0,00														
B_13	3,29	3,29													3,29	
B_14	0,00	0,00														
Not Defined	3,57	1,79							3,57							

Table 66: Ideas CAT Indicator Creativity, Value, Fit Workshop B

CAT Creative P Workshop Actor	Idea Ranking WS		Idea_P_2	Idea_P_1	Idea_P_4	Idea_P_3	Idea_P_10	Idea_P_7	Idea_P_9	Idea_P_5	Idea_P_8	Idea_P_6
	Summ	Summ/n	1	2	3	4	5	6	7	8	9	10
P_1	0,00	0,00										
P_2	0,00	0,00										
P_3	0,00	0,00										
P_4	0,00	0,00										
P_5	4,75	4,75			4,75							
P_6	5,00	5,00							5,00			
P_7	9,00	4,50						5,00		4,00		
P_8	0,00	0,00										
P_9	3,25	3,25		3,25								
P_10	0,00	0,00										4,00
P_11	6,25	3,13	3,00			3,25						
P_12	0,00	0,00										
P_13	2,75	2,75									2,75	
Not Defined	4,75	4,75						4,75				

Table 67: Ideas CAT Indicator Creativity Workshop P

CAT Cre+Val+Fit P Workshop Actor	Idea Ranking Summ Summ/n	Idea_P_2	Idea_P_1	Idea_P_4	Idea_P_3	Idea_P_10	Idea_P_7	Idea_P_9	Idea_P_5	Idea_P_8	Idea_P_6
		1	2	3	4	5	6	7	8	9	10
P_1	0,00	0,00									
P_2	0,00	0,00									
P_3	0,00	0,00									
P_4	0,00	0,00									
P_5	5,00	5,00			5,00						
P_6	4,25	4,25						4,25			
P_7	7,83	3,92					3,67		4,17		
P_8	0,00	0,00									
P_9	3,83	3,83		3,83							
P_10	0,00	0,00									3,25
P_11	7,92	3,96	3,67		4,25						
P_12	0,00	0,00									
P_13	2,92	2,92								2,92	
Not Defined	4,92	4,92				4,92					

Table 68: Ideas CAT Indicator Creativity, Value, Fit Workshop P

CAT Creative U Workshop Actor	Idea Ranking Summ Summ/n	Idea_U_5	Idea_U_2	Idea_U_3	Idea_U_4	Idea_U_1	Idea_U_6	Idea_U_7	Idea_U_8	Idea_U_9	Idea_U_10
		1	2	3	4	5	6	7	8	9	10
U_1	3,25	3,25			3,25						
U_2	8,00	8,00							4,25	3,75	
U_3	6,63	3,31		2,88				3,75			
U_4	0,00	0,00									
U_5	3,00	3,00					3,00				
U_6	4,63	4,63		4,63							
U_7	4,50	4,50	4,50								
U_8	0,00	0,00									
U_9	0,00	0,00									
U_10	0,00	0,00									
U_11	0,00	0,00									
U_12	0,00	0,00									
U_13	6,25	2,08				2,63					3,63

Table 69: Ideas CAT Indicator Creativity Workshop U

CAT Cre+Val+Fit U Workshop Actor	Idea Ranking Summ Summ/n	Idea_U_5	Idea_U_2	Idea_U_3	Idea_U_4	Idea_U_1	Idea_U_6	Idea_U_7	Idea_U_8	Idea_U_9	Idea_U_10
		1	2	3	4	5	6	7	8	9	10
U_1	3,29				3,29						
U_2	7,33								3,83	3,50	
U_3	5,79			2,58				3,21			
U_4	0,00										
U_5	3,21						3,21				
U_6	4,13			4,13							
U_7	4,04	4,04									
U_8	0,00										
U_9	0,00										
U_10	0,00										
U_11	0,00										
U_12	0,00										
U_13	5,96						3,17				2,79

Table 70: Ideas CAT Indicator Creativity, Value, Fit Workshop U

CAT Creative G Workshop Actor	Idea Ranking Summ Summ/n	Idea_G_2	Idea_G_3	Idea_G_13	Idea_G_4	Idea_G_5	Idea_G_6	Idea_G_7	Idea_G_8	Idea_G_9	Idea_G_10	Idea_G_11	Idea_G_12	Idea_G_1	Idea_G_14	Idea_G_15	Idea_G_16
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
GW_1	4,13							4,13									
GW_2	14,13			4,63								4,13			2,25	3,13	
GW_3	3,63								3,63								
GW_4	10,88										3,25		4,13				3,50
GW_5	4,00					4,00											
GW_6	6,13			3,63		2,50											
GW_7	0,00																
GW_8	0,00																
GW_9	2,88						2,88										
GW_10	0,00																
GW_11	3,75																3,75
GW_12	3,38			3,38													
GW_13	0,00																
GW_14	4,00								4,00								
GW_15	0,00																

Table 71: Ideas CAT Indicator Creativity Workshop G

CAT Creative G Workshop Actor	Idea Ranking Summ Summ/n	Idea_G_2	Idea_G_3	Idea_G_13	Idea_G_4	Idea_G_5	Idea_G_6	Idea_G_7	Idea_G_8	Idea_G_9	Idea_G_10	Idea_G_11	Idea_G_12	Idea_G_1	Idea_G_14	Idea_G_15	Idea_G_16
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
GW_1	3,92							3,92									
GW_2	14,21			4,08								3,88		3,00	3,25		
GW_3	3,79								3,79								
GW_4	10,29										3,67		3,46				3,17
GW_5	3,46						3,46										
GW_6	6,33			3,25		3,08											
GW_7	0,00																
GW_8	0,00																
GW_9	3,54						3,54										
GW_10	0,00																
GW_11	3,38																3,38
GW_12	4,00																
GW_13	0,00																
GW_14	3,71								3,71								
GW_15	0,00																

Table 72: Ideas CAT Indicator Creativity, Value, Fit Workshop G

### 8.3 Appendix Questionnaire II (T1) Part B

The following section displays the questions used in the Intrinsic Motivation Inventory in adapted (see further internet source) and original form. The instrument derived from the work of Deci & Ryan (*e.g.* 2003) on self-determination theory.

#### Intrinsic Motivation Inventory:

- 1. I believe that the work on innovation projects is one of the most important tasks in the company.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: I think this is an important activity. (Value/Usefulness)

- 2. During the workshop I thought how much fun the work is.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: This activity was fun to do. (Interest/Enjoyment)

- 3. I think I did pretty well in the workshop, compared to others**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: I think I did pretty well at this activity, compared to other students. (Perceived Competence)

**4. This work on innovative ideas was very interesting**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: I would describe this activity as very interesting. (**Interest/Enjoyment**)

**5. I think the participation on innovation projects gives me a possibility to gain a lot of experience.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: I think doing this activity could help me to \_\_\_\_\_ (adapt to project) (**Value/Usefulness**)

**6. I considered the tasks in the workshop as very boring.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: I thought this was a boring activity. (R) (**Interest/Enjoyment**)

**7. I thought this activity was quite enjoyable.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all		somewhat			very	
true		true			true	

Original Item: I thought this activity was quite enjoyable. (**Interest/Enjoyment**)

**8. I think I am pretty good at this creative work.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

Original Item: I think I am pretty good at this activity. (**Perceived Competence**)

**9. I am satisfied with my performance in the workshop.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

Original Item: I am satisfied with my performance at this task. (**Perceived Competence**)

**10. I believe the work in innovation projects is very helpful for my professional development.**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

Original Item: I believe doing this activity could be beneficial to me. (**Value/Usefulness**).