



Books Conferences News About Us Home Journals Job: Home > Journal > Social Sciences & Humanities > CE Open Special Issues Indexing View Papers Aims & Scope Editorial Board Guideline Article Processing Charges Published Special Issues CE> Vol.2 No.3, August 2011 • Special Issues Guideline OPEN ACCESS **CE** Subscription Features of Creativity as Expressed in the Construction of New Analogical Problems by Intellectually Gifted Students Most popular papers in CE PDF (Size: 183KB) PP. 164-173 DOI: 10.4236/ce.2011.23023 About CE News Author(s) Rama Klavir, Klavir Gorodetsky Frequently Asked Questions **ABSTRACT** The present research attempts to provide empirical data on creativity features that were employed by Recommend to Peers gifted students, as compared to 'regular' ones, in the process of constructing analogical problems. The research is coping with two major components of creativity: a) Readiness to get involved in the construction Recommend to Library of new analogical problems and b) Creative features in the constructed problems. The results indicate that: 1) Gifted students were more creative than their age peers on the dimensions that were defined as relative Contact Us creativity. 2) Relative creativity was especially salient in tasks that involved insight thinking. 3) Despite the high relative creativity of the gifted students' their comparative creativity, i.e. their creative capabilities as compared to the optimum, were limited. The results are coherent with the need and recommendations for Downloads: 195,379 progressive nurturing of gifted students towards fulfilling their creative potential. Visits: 428,334 **KEYWORDS** Intellectual Giftedness, Relative Creativity, Comparative Creativity, Construction of Analogical Problems, Readiness to Become Creative, Features of Creative Products Sponsors, Associates, ai Links >> Cite this paper Klavir, R. & Gorodetsky, K. (2011). Features of Creativity as Expressed in the Construction of New Analogical • The Conference on Information Problems by Intellectually Gifted Students. Creative Education, 2, 164-173. doi: 10.4236/ce.2011.23023. Technology in Education (CITE References 2012) [1] Amabile, T. M. (1996). Creativity in context. Boulder, CO: Westview Press. [2] Baer, J., & Kaufman, J. C. (2005). Bridging generality and specificity: The Amusement Park Theoretical (APT) model of creativity. Roeper Review, 27, 158-163. doi:10.1080/02783190509554310 [3] Barron, F. (1988). Putting creativity to work. In R.J. Sternberg (Ed.), The Nature of Creativity (pp. 76-98). New York: Cambridge University Press. Bassok, M., Chase, V. M., & Martin, S. A. (1998). Adding apples and oranges: Alignment of semantic [4] and formal knowledge. Cognitive Psychology, 35, 99-134. doi:10.1006/cogp.1998.0675 Bonk, C. (2003). Creativity Tests: Guilford's Alternative Uses Task (1967). Indiana University: school [5] education: department of psychology. URL educational http://www.indiana.edu/~bobweb/Handout/sub/Bob_CT_Uses.html [6] Briskman, L. (1980). Creative product and creative process in science and art. Inquiry, 23, 83-106. doi: 10.1080/00201748008601892 [7] Besemer, S. P., & O'Quin, K. (1993). Assessing creative products: Progress and potentials. In S. G.

Isaksen, M. Murdock, R. Firestien, & D. Treffinger (Eds.), Nurturing and Developing Creativity: The

Bull, K. S., Montgomery, D., & Kimball, S. L. (1999). Stimulating creativity in online teaching: An

Oklahoma

State

University.

URL

OK:

Emergence of a Discipline (pp. 331-349). Norwood, New Jersey: Ablex Publishing Corp.

Stillwater,

http://home.okstate.edu/homepages.nsf/toc/EPSY5213_Reading_11b

[8]

instructional

hypertext.

- [9] Davidson, J. E. (1986). Insight and giftedness. In R. J. Sternberg, & J. E. Davidson (Eds.), Conceptions of Giftedness (pp. 201-222). New York: Cambridge University Press.
- [10] Davidson, J. E., & Sternberg, R. J. (1984). The role of insight in intellectual giftedness. Gifted Child Quarterly, 28, 58-64. doi:10.1177/001698628402800203
- [11] Dover, A., & Shore, B. M. (1991). Giftedness and flexibility on a mathematical set-breaking task. Gifted Child Quarterly, 35, 99-105. doi:10.1177/001698629103500209
- [12] El-Murad, J. & West, D. C. (2004). Definition and measurement of creativity: What do we know? Journal of Advertising Research, 44, 188-201. doi:10.1017/S0021849904040097
- [13] Feldman, D.H. (1999). The development of creativity. In R.J. Sternberg (Ed.), Handbook of Creativity (pp. 169-186). New York: Cambridge University Press.
- [14] Gentner, D., Loewenstein, J., & Thompson, L. (2003). Learning and transfer: A general role for analogical encoding. Journal of Educational Psychology, 95, 393-408. doi:10.1037/0022-0663.95.2.393
- [15] Gentner, D., Brem, S., Ferguson, R., Wolff, P., Markman, A., & Forbus, K. (1997). Analogy and creativity in the works of Johannes Kepler. In T. Ward, S. Smith, & J. Vaid (Eds.), Creative Thought: An Investigation of Conceptual Structures and Processes, (pp. 403-459). Washington DC: American Psychological Association. doi:10.1037/10227-016
- [16] Gorodetsky, M., & Klavir, R. (2003). What can we learn from how gifted/average pupils describe their processes of problem solving? Learning and Instruction, 13, 305-325. doi:10.1016/S0959-4752(02) 00005-1
- [17] Guilford, J. P. (1967). The Nature of Human Intelligence, New York: McGraw-Hill Book Company.
- [18] Hennessey, B. A. (2004). Developing Creativity in Gifted Children: the Central Importance of Motivation and Classroom Climate (RM04202). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.
- [19] Hennessey, B. A., & Amabile, T. M. (1988). Storytelling: A method for assessing children's creativity. Journal of Creative Behavior, 22, 235-246.
- [20] Karimi, Z., Windmann, S., Güntürkün, O., & Abraham, A. (2007). Insight problem solving in individuals with high versus low schizotypy. Journal of Research in Personality, 41, 473-480. doi:10.1016/j.jrp.2006.03.008
- [21] Klavir, R., & Gorodetsky, M. (2009). On excellence and creativity: A study of gifted and expert students. In R. Leikin, A. Berman, & B. Koichu, (Eds.). Creativity in Mathematics and the Education of Gifted Students. (pp. 221-242). SENSE Publisher Exhibition.
- [22] Klavir, R., & Gorodetsky, M. (2001). The encounter of gifted/non- gifted students with cartoons and their analogical verbal problems. Gifted Child Quarterly, 45, 205-215. doi:10.1177/001698620104500305
- [23] Klavir, R., & Hershkovitz, S. (2008). Teaching and evaluating 'open-ended' problems. International Journal for Mathematics Teaching and Learning. URL http://www.cimt.plymouth.ac.uk/journal/default.htm
- [24] Kleiman, P. (2005). Beyond the Tingle Factor: Creativity and Assessment in Higher Education. Paper presented at the ESRC Creativity Seminar, University of Strathclyde, 7 October 2005. http://opencreativity.open.ac.uk/assets/pdf/strathclyde/Beyond%20the%20Tingle%20Facto.pdf
- [25] Lake, A. (1976). The Puzzle Book. New York: Hart Publishing.
- [26] Martindale, C. (1999). Biological bases of creativity. In R. Sternberg, (Ed.), Handbook of Creativity (pp. 137-152). Cambridge: University Press.
- [27] Milgram, R. M., & Livne, N. (2006). Research on creativity in Israel: A chronicle of theoretical and empirical development. In J.C. Kaufman, & R.J. Sternberg (Eds.), The International Handbook of Creativity (pp. 307-336). New York: Cambridge University Press.
- [28] Mulhern, J. D. (2003). The gifted child in the regular classroom. Roeper Review, 25, 112-115. doi:10.1080/02783190309554211
- [29] Mumford, M. D. (1998). Creative thought: Structure, components and educational implications.

- Roeper Review, 21, 14-19. doi:10.1080/02783199809553920
- [30] Mumford, M. D., Decker, B. P., Connelly, M. S., Osburn, H. K., & Scott, G. (2002). Beliefs and creative performance: Relationships across three tasks. The Journal of Creative Behavior, 36, 153-181.
- [31] Nevo, B. (1997). Creativity. In B. Nevo (Ed.), Human Intelligence (pp. 635-686). Tel Aviv: The open university of Israel. (Hebrew).
- [32] Planche, P. (1985). Modalités fonctionnelles et conduites de résolution de problème chez des enfants précoces de 5, 6 et 7 ans d'age chronologique. Archives de Psychologie, 53, 411-415.
- [33] Reiter-Palmon, R., Mumford, M. D., O' Connor B. J., & Runco, M. A. (1997). Problem construction and creativity: The role of ability cue consistency and active processing. Creativity Research Journal, 10, 9-23. doi:10.1207/s15326934crj1001_2
- [34] Renzulli, J. S. (1998). The three-ring conception of giftedness. In S. M. Baum, S. M. Reis, & L. R. Maxfield (Eds.), Nurturing the Gifts and Talents of Primary Grade Students. Mansfield Center, CT: Creative Learning Press. URL http://www.gifted.uconn.edu/sem/semart13.html
- [35] Rex, L. (1996). A Theory of Conceptual Intelligence: Thinking, Learning, Creativity and Giftedness. Westport, C.T: Praeger Publishers.
- [36] Rogers, K. B. (2002). Re-forming Gifted Education: Matching the Program to the Child. Scottsdale, AZ: Great Potential Press Inc.
- [37] Rogers, M. T., & Silverman, L. K. (1998). Recognizing giftedness in young children. Eric Clearinghouse on Handicapped and Gifted Children. ED428471. URL http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/25/ae/96.pdf
- [38] Runco, M.A. (2005). Creative giftedness. In R.J. Sternberg & J.E. Davidson (Eds.), Conceptions of Giftedness (2nd ed., pp. 295-311). New York: Cambridge University Press. Washington DC: American Psychological Association.
- [39] Runco, M.A. (2007). Creativity: Theories and Themes: Research, Development and Practice. Amsterdam, Boston: Elsevier Academic Press.
- [40] Schunk, D.H., & Pajares, F. (2005). Competence perceptions and academic functioning. In A.J. Elliott, & C.S. Dweck (Eds.), Handbook of Competence and Motivation (pp. 85-104). New York: Guilford Press.