

Pedagogical trends in the Aegean

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Τεύχος 4

παιδαγωγικά ρεύματα στο Αιγαίο
διεθνής περιοδική έκδοση παιδαγωγικών προβληματισμών

Παιδιά με Μαθησιακές Δυσκολίες και Παιδιά
Μειονοτήτων Κοινά Προβλήματα στη Μαθηματική
Εκπαίδευση;

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Abstract

We are presenting here the difficulties that minority students and students with learning difficulties face while learning mathematics. Specifically, we deal with students with learning difficulties, with minority students, and especially minority student with learning difficulties students coming from linguistic minorities and facing learning difficulties concerning mathematics. Teaching methods that could possibly improve the performance of those students are further investigated while at the same time the need for research in this field focusing on the Greek framework is pin-pointed.

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(Bilingual education, sel 1 Baca, L., & de Valenzuela, J. S. (1998). Background and rationale for bilingual special education. In L. Baca & H. Cervantes (Eds.), *The bilingual special education interface* (3rd ed., pp. 2-25). Upper Saddle River, NJ: Merrill.

(Badian, 1983).

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¹⁵ (costa, 2003).
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2003). (costa, 2003).
 (Kibel, 1992).
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 (Brenner, 1988).
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 1994). (Cohen,
 (Raborn, 1995).
 (),
 ()
 (costa, 2003).

(Gersten & Woodward, 1994),

, 2005: 23).

- costa, B., (2003), Answering the Questioní ...:How Can I Teach Mathematics to Students Who Have Cognitive and Behavioral Disabilities and Who Come from Diverse Cultural and Language Backgrounds? <http://www.emstac.org/resources/cladmth.doc>
- costa, B., & Spence, M. (2001). Multicultural Mathematics. Unpublished manuscript, Washington, DC).
- Adler, 2002) Adler, J. and Reed, Y. (Eds.), (2002), Challenges of Teacher Development: An investigation of take-up in South Africa, Van Schaik: Pretoria.
- Badian N.A. (1983). Arithmetic and Nonverbal Learning. : Myklebust, H.R., (Ed.), Progress in Learning Disabilities, Volume V. New York: Grunt & Stratton.
- Bley, N. S., & Thornton, C. A. (1995). Teaching Mathematics to the Learning Disabled. Rockville, MD: Aspen.
- Brenner, M. E. (1998). Development of Mathematical Communication in Problem Solving Groups by Language Minority Students. *BRJ*, 22 (2,3 & 4).
- Chronaki, . (2004). Learning about "Learning Identities" in the School Arithmetic Practice: The Experience of two Young Minority Gypsy Girls in the Greek Context of Education. *European Journal of Psychology of Education: Special Issue on "The Social Mediation of Learning in Multiethnic Classrooms"* Guest Editors: Guida de Abreu and Ed Elbers. Vol. XX, no 1, (61-74).
- Cocking, R. R., & Chipman, S. (1988). Conceptual Issues related to Mathematics Achievement of Language Minority Children, : R. R. Cocking & J. P. Mestre (Eds.), *Linguistic and Cultural Influence o nLearning Mathematics*, Hillsdale:
- Cohen, E. G. (1994). Designing Groupwork: Strategies for the Heterogeneous cClassroom. New York: Teachers College Press.
- Cohn, R. (1971). Arithmetic and Learning Disabilities, : Myklebust, M.R., (Ed.) Progress In Learning Disabilities, VOL 11, New York: Grunt & Stratton
- Cole, .. & Scribner, S. (1974), *Culture and Thought*, New York: John Wiley and Sons, Inc.
- Fellows, M., Koblitz, A.H., & Koblitz, N (1994). Cultural Aspects of Mathematics Education Reform. *Notices of the American Mathematical Society*, 41 (1), 5-9.
- Furner, J. M. & Duffy, M. L. (2002). Equity for All Students in the New Millennium: *Disabling Math Anxiety Intervention in School and Clini,c* Vol. 38, (67-74)
- Garnett, Kate (1998). Math Learning Disabilities. *Division for Learning Disabilities Journal of CEC*, November 1998. LD Online, http://www.ldonline.org/ld_indepth/math_skills/garnett.html

Cuevas, G. J. & Beech, M. C. (1983). A Second-Language Approach to Mathematics Skills: Applications for Limited-English Proficient Students with Learning Disabilities. *Learning Disabilities Quarterly*, 6, (489-495)

Gersten, R., & Woodward, J. (1994). The Language ó Minority Student and Special Education: Issues Trends, and Paradoxes, *Exceptional Children*, 60, (310-322)

Kibel, M. (1992). Linking Language to Action., : T. R. Miles & E. Miles (Eds.), *Dyslexia and Mathematics*, London: Routledge.

Kosc, L. (1974). Developmental Dyscalculia. *Journal of Learning Disabilities*, 7, (164-177)

LaCelle-Peterson, M. W., & Rivera, C. (1994). *Is it Real for Kids? A framework for Equitable Assessment Policies for English language learners* (CPS-RP-1). Washington, DC: Centre for Policy Studies, The George Washington University

Lancy, F. David, (1983), *Cross-Cultural Studies in Cognition and Mathematics*. Development Psychology Series. Academic Press.

Macnamara, J. (1966). *Bilingualism and Primary Education*. Edinburgh: Edinburgh University Press.

McDermott, R.P.(1974) *Achieving School Failure: an Anthropological Approach to Illiteracy and Social Stratification*, : G. D. Spindler (ed), *Education and Cultural Process: Towards an Anthropology of Education*, New York: Holt, Rinehart and Winston.

McKinney, J.D., & Feagans, L. (1980). *Learning Disabilities In the Classroom* (Final project report). Chapel Hill: University of North Carolina, Frank Porter Graham Child. Development Centre

Miller, S. & Mercer, C. (1997). Educational Aspects of Mathematics Disabilities. *Journal of Learning Disabilities*, 30, (47-56)

NCTM, (2000). <http://standards.nctm.org/document/chapter1/index.htm> (200).

Raborn, D. T. (1995). Mathematics for Students with Learning Disabilities from Language-Minority Backgrounds: Recommendations for Teaching, *New York Association for Bilingual Education Journal*, v10, (25-33)

Rivera, D. M. (1993). Examining Mathematics Reform and the Implications for Students with Mathematics Disabilities. *Remedial and Special Education*, 14, (6), (24-27)

Strang, J. D, & Rourke, B. P. (1985). Adaptive behavior of Children Who Exhibit Specific Arithmetic Disabilities and Associated Neuropsychological Abilities and Deficits, : B. P. Rourke (Ed.) *Neuropsychology of Learning Disabilities*. New York: The Guilford Press

, . (2000), : , , - , : & (2005), , : , 2005.

Cummins, J. (1999), , - , . , Gutenberg, .

Goffman. . (2001), : , : , . (2005), , , : , . (2006) : - , : , . (2002). - : , : & , . (- .), : / , .& , . (- .)

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