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On Fostering a Co-Creative Process within a CSCL Framework

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ABSTRACT
In this article is introduced a co-creative process fostered by a Collaborative Learning Framework which pursues to engage peers of students in a synchronous collaborative dynamic to build the knowledge by representing it by a formal digraph called Networks of Concepts (NoC). This digraph, the NoC, allows building and representing the knowledge in a synthetic way, whilethe co-creative process aims at developing cognitive skills and collaborative attitudes as essential part of 21st century skills for students. Nowadays,the Collaborative Learning Framework has been and is currently being used in Mexican universities in different undergraduate programs such as Industrial Engineering, Computer Science, Sociology, Accounting, Business Administration, and Molecular Biology; in this article we analyze and discuss a particular case of an example in the Engineering program. Thus, the analyzed digraphs are the outcome of a co-creative process that is carried out through synchronous-mode argumentation and shared interactions by peers of students.

KEYWORDS
Co-Creative Process; CSCL; Network of Concepts; Cognitive Skills

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References
[1]   Barrows, H. (1985). Designing a problem-based curriculum for the preclinical year. New York: Springer.

[2]   Barrows, H. S., & Tamblyn, R. N. (1980). Problem-based learning: An approach to medical education. Berlin: Springer.

[3]   Diaz, M. (2009). Petri nets: Fundamental models, verification and applications. Hoboken, NJ: Wiley-ISTE.

[4]   Dillenbourg, P. (1999). What do you mean by " collaborative learning" ? In P. Dillenbourg (Ed.), Collaborative-learning: Cognitive and computational approaches (pp. 1-19). Oxford: Elsevier.

[5]   Dillenbourg, P., Baker, M., Blaye, A., & O'Malley, C. (1996). The evolution of research on collaborative learning. In P. S. Reimann (Ed.), Learning in humans and machine: Towards an interdisciplinary learning science (pp. 189-211). Oxford: Pergamon.

[6]   Garrison, D. (1992). Critical thinking and self-directed learning in adult education: An analysis of responsibility and control issues. Adult Education Quarterly, 42, 136-148.

[7]   Gibbons, M. (2002). The self-directed learning handbook: Challenging adolescent students to excel. San Francisco, CA: Jossey-Bass.

[8]   Giemza, A., & Ziebarth, S. (2008). Overview of the freestyler modeling environment. Recuperado el Noviembre de 2009, de Collide Faculty of Engineering, University of Duisburg-Essen. URL. http://www.collide.info/images/b/b1/FreeStyler_description.pdf

[9]   Goel, V. (1992). A comparison of well-structured and ill-structured task environments and problem spaces. In Proceedings of the fourteenth annual conference of the Cognitive science society. Hillsdale, NJ: Erlbaum.

[10]   Goodsell, A. S., Maher, M., Tinto, V., Leigh, S. B., & MacGregor, J. (1992). Collaborative Learning: A sourcebook for higher education. University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment.

[11]   Gunasekaran, A. (1998). Agile manufacturing: Enablers and an implementation framework. International Journal of Production Research, 36, 1223-1247. dsoi:10.1080/002075498193291

[12]   Jonassen, D. (1997). Instructional design models for well-structured and ill-structured problem-solving learning outcomes. Educational Technology Research and Development, 45, 65-94.

[13]   Koschman, T., Feltovich, P., Myers, A., & Barrows, H. (1992). Implications of CSCL for problem-based learning. ACM SIGCUE Outlook, 21, 32-35.

[14]   Lumsden, C. (1999). Evolving creative minds: Stories and mechanisms. In R. Sternberg, & T. Lubart (Eds.), Handbook of creativity (Vol. 1, pp. 153-168). London: Cambridge University Press.

[15]   Ontoria Pe?a, A., Ballesteros Pastor, A., Martín Buenadicha, I., Molina Rubio, A., Cuevas Moyas, C., Vélez Ramírez, U. et al. (1992). Mapas conceptuales. Una técnica para aprender. Madrid: Narcea.

[16]   Peterson, J. L. (1981). Petri net: Theory and the modeling of systems. Englewood Cliffs, NJ: Prentice Hall.

[17]   Pressman, R. S. (2002). Software engineering: A practitioner's approach (5th ed.). Boston, MA: McGraw-Hill.

[18]   Ramos-Quintana, F., Sámano-Galindo, J., & Zárate-Silva, V. (2008). Collaborative environments through dialogues and PBL to encourage the self-directed learning in Computational sciences. In M. Bubak, G. van Albada, J. Dongarra, & P. Sloot (Eds.), Computational Science— ICCS 2008 (pp. 725-734). Berlin/Heidelberg: Springer.

[19]   Ramos-Quintana, F., Sámano-Galindo, J., & Zárate-Silva, V. H. (2008a). A formal interpretation of implicit messages in agent dialogues. In IADIS Intelligent Systems and Agents 2008 (pp. 237-240). Holanda: InterScience.

[20]   Rojano-Caceres, J., Ramos-Quintana, F., & Garcia-Gaona, A. (2010). Proposal for a collaborative distributed tool for building network of concepts. XXIII Congreso Nacional y IX Congreso Internacional de Informática y Computación (pp. 383-388). Puerto Vallarta: Alfa-Omega.

[21]   Runco, M. (2007). Creativity. theories and themes: Research, development and practice. Amsterdam: Elsevier.

[22]   Sanchez, L., & Nagi, R. (2001). A review of agile manufacturing systems. International Journal of Production Research, 39, 3561-3600. doi:10.1080/00207540110068790

[23]   Scott, G., & Lyle, E. L. (2004). The effectiveness of creativity training: A quantitative review. Creativity Research Journal, 16, 361-388. doi:10.1080/10400410409534549

[24]   Shaw, M. P. (1991). On the creative process in science and engineering. In Technology management: The new international language (pp. 635-639). Portland, OR: IEEE.

[25]   Sternberg, R., & Lubart, T. (1999). The concept of creativity: Prospects and paradigms. In R. Sternberg, & T. I. Lubart (Eds.), Handbook of creativity (Vol. 1, pp. 3-15). London: Cambridge University Press.

[26]   Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge MA: Harvard University Press.