Vitor Duarte Teodoro

Curriculum vitae, synthesis

Assistant Professor ("Professor Auxiliar com nomeação definitiva") at the New University of Lisbon, Portugal

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Personal data

Full name: Vítor Manuel Neves Duarte Teodoro.

Born February 12, 1955.

Married, with one son, residing in Almada.

Education

PhD in Education (Curriculum Theory and Evaluation), 2003, New University of Lisbon.

Degree of licentiate in Physics, 1978, University of Lisbon.

Other specific training: Educational Testing (Educational Testing Service, Princeton, USA, 1983); The Management of Examinations (University of Southampton, UK, 1984); World Bank Seminar on The Role of Examinations and Testing in Educational Management (Lisbon, 1987); Seminar on College Teaching (Cornell University, 1992)

Professional career

2003-present assistant professor (tenure from 2008), Department of Social Sciences and Education, New University of Lisbon, College of Science and Technology.

1988-2003 university lecturer, Department of Social Sciences and Education, New University of Lisbon, College of Science and Technology.

1975-1988, Secondary school teacher.

Teaching activity

At the university: didactics and science education, master courses for science teachers; research methods, MEd and PhD courses in Education, including thesis supervision; scientific computation, chemistry and physics engineering students; general physics, chemistry and physics engineering students; educational technologies.

Invited professor at the University of São Paulo (Brasil, 1993), Catholic University (Lisbon, since 2004), Open University of Portugal (1990-2000).

In secondary schools: Physics, Chemistry, Mathematics, Natural Sciences.

Other activities related with teaching

Design and preparation of registration dossiers of masters courses in teaching Physics and Chemistry and in teaching of Biology and Geology. Coordinator of the Master Course Teaching Physics and Chemistry.

Collaboration in the design and preparation of registration dossiers of doctoral studies in education, in collaboration with ISPA and FCSHUNL. Member of the Coordination of the course.

Research

Main research area: science and mathematics education (embedding scientific computing in the secondary school curricula and in undergraduate studies in science and engineering).

Other research/professional interests: principles and design of active learning environments, particular for science and mathematics education; educational assessment and evaluation; teacher education; curriculum development.

Participation in several research projects funded by the European Community and Portuguese Research bodies and governmental departments.

Other professional activities

DCSA-FCTUNL Coordinator: Section of History of Science and Technology and Educational Sciences (since 2009).

Elected member of the Scientific Council of FCTUNL since 2009.

Coordinator of the Education Division of the Portuguese Physics Society since 2007.

Consultant to the Portuguese Ministry of Education in several areas (examinations; teacher education; curriculum development; laboratory and school design; digital educational resources). Author of several reports for the Ministry of Education on these subjects.

Coordinator of an Ibero-American network on the educational use of information technologies from 1995 to 2001.

Author of more than 30 textbooks for schools in Portugal and Cape Verde (Physics and Chemistry).

Most relevant publications

Software

Teodoro, V. D., Vieira, J. P., & Clérigo, F. C. (1997). Modellus, Interactive Modelling with Mathematics (Version 1.0). San Mateo, Cal.: Knowledge Revolution. Currently on version 4, available at http://modellus.fct.unl.pt .

Journals

Neves, R., & Teodoro, V. D. (2010), Mathematical modelling in science and mathematics education, Computer Physics Communications, doi:10.1016/j.cpc.2010.05.021

Neves, R., & Teodoro, V. (2010). Enhancing Science and Mathematics Education with Computational Modelling. Journal of Mathematical Modelling and Application, 1(2), 2-15.

Teodoro, V. (2005). Cognitive Artefacts, Technology and Physics Education. Interactive Educational Multimedia, 11, 173-189.

Teodoro, V. D. (2004). Playing Newtonian Games with Modellus. Physics Education, 39(5), 421-428.

Veit, E. A., & Teodoro, V. D. (2002). Modelagem no ensino/aprendizagem de Física e os novos parâmetros curriculares nacionais para o ensino médio. Revista Brasileira de Ensino de Física, 24(2), 87-96.

Veit, E. A., Mors, P. M., & Teodoro, V. D. (2002). Ilustrando a Segunda Lei de Newton no Século XXI. Revista Brasileira de Ensino de Física, 24(2), 176-184.

Teodoro, V. D., & Valente, M. O. (2001). Modellus, modelação matemática nas ciências físicas e renovação do currículo. Inovação, 14(3), 45-61.

Teodoro, V. D. (1990). Computadores, aprendizagem e ensino da física: o computador como 'laboratório conceptual'. Análise Psicológica, VIII(1), 75-82.

Chapters in Books and Books

Teodoro, V. D. (2006). Embedding Modelling in the General Physics Course: Rationale & Tools. In T. Ellermeijer & E. v. d. Berg (Eds.), Modelling in Physics and Physics Education. Amsterdam: University of Amsterdam.

Teodoro, V. D. (2004). Accesing, creating, publishing, measuring, experiencing and collaborating : using computers to change the basic curriculum in engineering In Á. G. Panqueva, V. A. Laclaustra, M. R. Jiménez, I. F. P. Arrieta, A. J. Cañas, C. M. Zea, J. Novak, M. d. R. Atuesta, C. M. Colado, M. Henao, P. Hernández, V. D. Teodoro, M. Á. V. Hernández, Á. T. Macías, A. M. Acuña & C. A. R. Castro (Eds.), *Repensando la Educación Superior con Nuevas Tecnologías de Información y Comunicación*. Bogotá: Escuela Colombiana de Ingeniería.

Teodoro, V. D. (1998). From formulae to conceptual experiments: Interactive modelling in the physical sciences and in mathematics International CoLos Conference New Network-Based Media in Education (pp. 13-22). Maribor, Slovenia: University of Maribor.

Teodoro, V. D. (1994). Learning with computer-based exploratory environments. In S. Vosniadou, E. deCorte & H. Mandl (Eds.), Technology-Based Learning Environments, Psychological and Educational Foundations. Berlin: Springer-Verlag.

Teodoro, V. D. (1993). The computer as a conceptual lab: learning dynamics with an exploratory environment. In D. L. Ferguson (Ed.), Advanced technologies in the teaching of mathematics and science. Berlin: Springer-Verlag.

Teodoro, V. D. (1993). A model to design exploratory software for science and mathematics. In T. d. Jong, H. Spada & D. Tawne (Eds.), The use of computer models for explication, analysis and experiential learning. Berlin: Springer-Verlag.

Teodoro, V. D., & Freitas, J. C. (Eds.). (1992). Educação e Computadores. Lisboa: Ministério de Educação/GEP.

Teodoro, V. D. (1992). Direct manipulation of physical concepts in a computerized exploratory laboratory. In E. d. Corte, M. C. Linn, H. Mandl & L. Verschaffel (Eds.), Computer-Based Learning Environments and Problem Solving. Berlin: Springer-Verlag.

Teodoro, V. D. (1991). Logiciels pour explorer des objects concret-abstraits. In M.-G. Séré & A. Weil-Barais (Eds.), L'éxplication dans l'enseignment et l'EIAO. Paris: Onze Édition & Association Tour 123.