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## **CURRICULUM VITAE**

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May 2014

a) NAME:

**Monteiro, Rute** Adjunct Professor

Scientific Area of Specifics Didactics (Teaching)  
Department of Sciences, Nature and Sports  
School of Education and Communication  
University of Algarve  
Portugal

b) DEGREES:

Ph.D. Science Education, University of Huelva, Spain, 2006  
“Licenciante” degree (five years degree), Biology, University of Porto, Portugal, 1997

c) EMPLOYMENT HISTORY:

2010-2014 Adjunct Professor, Scientific Area of Specifics Didactics (Teaching) -  
Department of Sciences, Nature and Sports, School of Education and  
Communication, University of Algarve, Portugal.  
2009-2010 Adjunct Professor (by contract), Scientific Area of Specifics Didactics,  
Department of Sciences, Nature and Sports, School of Education and  
Communication, University of Algarve, Portugal.  
1999-2009 Assistant Professor (by contract), Scientific Area of Specifics Didactics,  
Department of Sciences, Nature and Sports, School of Education and  
Communication, University of Algarve, Portugal.  
1998-1999 Teacher of Biology, Secondary School, Algarve, Portugal.  
1996-1997 Internship as a Teacher in the Secondary School, Porto, Portugal.

d) SCHOLARLY AND PROFESSIONAL ACTIVITIES: past 7 years only

2010-2013 Representative of the School of Education, in the Foundation to the  
Development of the Algarve University.  
2009-2014 Member of the Coordination Commission of the M.Sc. in “Social Education”,  
School of Education, University of Algarve, Portugal.  
2012-2013 External Expert in a TEIP Project “Programa de Territorialização de Políticas  
Educativas”. Institutional Partners: University of Algarve and Group of  
Schools D. José I, Vila Real de Santo António. Portugal.  
2006-2013 Member of the Scientific Board of the School of Education, University of  
Algarve, Portugal.  
2010-2011 Member of the Commission for the support of primary and secondary  
Teaching. Dean Order Nº 15/2010. Algarve University, Portugal.

- 2010-2011 Secretary of Scientific Board of the School of Education, University of Algarve, Portugal.
- 2008-2011 Member of the Coordination Commission of the M.Sc. in “Dynamization of Sciences in the School Context”, School of Education, University of Algarve, Portugal.
- 2008-2010 Member of the Commission of the General Inspection of Education, External Evaluation of the Primary and Secondary Schools and Kindergarten, by Ministerial Order, nº 31614/2008, December, 11th 2008.
- 2009-2010 Regional Coordinator in the National Program for Continuous Training of Primary Teacher in “Experimental Work in Science”. Institutional Partners: Ministry of Education (several primary schools), and School of Education, University of Algarve.
- 2006-2009 Member of Coordinator Commission and Training Teacher in the National Program for Continuous Training of Primary Teacher in “Experimental Work in Science”. Institutional Partners: Ministry of Education (several primary schools), and School of Education, University of Algarve. (for 4 years, with 400 primary teachers)

e) GRADUATE SUPERVISIONS: master=s, doctoral, postdoctoral – completed/in progress

Completed: 11 M.A., 1 Ph.D.

In progress: 1 M.A., 1 Ph.D.

f) GRADUATE COURSES: past 7 years

2013-2014 Teaching of Science; Zoology Teaching; Human Biology; Life and Earth Sciences (in M.Sc. Primary and Elementary Teacher) and Research Methodology (in M.Sc. in Social Education and M.Sc. Childhood Education); Supervision of internship students as novice teachers of both primary and elementary schools of the Algarve region.

2009-2013: Activities and Resources in Science (3rd year, Childhood Education); Teaching of Science; Human Biology; Cognition, Neurobiology and Learning (in a Primary Teacher M.Sc.); Research Methodology (M.Sc. in Social Education); Supervision of internship students as novice teachers of both primary and elementary schools of the Algarve region.

2008/2009: Activities and Resources in Science (3rd year, Childhood Education); Science Learning in the School Context I and Teaching and Learning (1st year, M.Sc. in Dynamization of Sciences in the School Context); Teaching of Biology (1st year, M.Sc. in Didactics and School Innovation).

g) EXTERNAL RESEARCH FUNDING: past 7 years only

<u>Year</u>	<u>Source</u>	<u>Purpose*</u>
2010-2013	Project 903109795-9795-4-9 Ministry of Science and Innovation, Spain Main researcher: José Yañez Carrillo.	Research/Publication
2010-2013	Project PTDC/CPE-CED/108739/2008	

Foundation to of Science and Technology, Portugal      Research/Publication  
Main researcher: António Fragoso Almeida.

\* Purpose: research, travel, publication, etc.

#### h) PUBLICATIONS:

1) Life-time summary (count) according to the following categories: (2009-2014)

Books authored.....	0
Books edited.....	0
Chapters in books .....	1
Papers in <u>refereed</u> journal.....	11
Papers in refereed conference proceedings.....	28
Technical reports.....	1

2) Details for past seven (7) years same categories as above: books, chapters in books, papers in refereed journals.

#### Chapters in Books:

**Monteiro, R.** & Carrillo, J. (2009). Teaching Modelisation and Professional Knowledge. In: Robert V. Nata (Ed.). Progress in Education, Vol. 18, Chapter 2. (P.1-27). USA, NYC: Nova Science Publishers. ISBN: 18978-1-60876-117-3.

#### Papers in refereed Journals:

Neves, J. & **Monteiro, R.** (2014). How full is your luggage? Background knowledge of zoo visitors regarding sharks. *Environmental Education Research*, 20(3), 291-312.

Fragoso, A., Gonçalves, T., Ribeiro, C. M., **Monteiro, R.**, Quintas, H., Bago, J., Fonseca, H. M. A. C., & Santos, L. (2013). Mature students' transition processes to higher education: Challenging traditional concepts? *Studies in the Education of Adults*, 45(1), 67-81.

Santos, C.S. & **Monteiro, R.** (2012). Aplicação do conhecimento das ciências para o ensino da célula – um estudo de caso instrumental (Application of science knowledge for teaching about cell – an instrumental case study). *Investigações em Ensino de Ciências*, 17(2), 529-543.

Ribeiro, C. M., Carrillo, J. & **Monteiro, R.** (2012). Cognições e tipo de comunicação do professor de matemática. Exemplificação de um modelo de análise num episódio dividido. *Relime*, 15(1), 277-310.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2011). Construindo um Modelo de Análise da Prática Lectiva numa Aula de Matemática (Building a model of practice analysis in the math classroom). *Revista Portuguesa de Educação*, 24 (2), 135-158.

**Monteiro, R.**, Carrillo, J. & Aguaded, S. (2010). Teacher Scripts in Science Teaching. *Teaching and Teacher Education*, 26(6), 1269-1279.

Ribeiro, C., **Monteiro, R.** & Carrillo, J. (2010). ¿Es el conocimiento matemático del profesorado específico de su profesión? Discusión de la práctica de una maestra. (Is the

mathematical knowledge of the teacher dependent from his profession? Analysis of the practice of a primary teacher). *Revista Educación Matemática*, 22(2), 93-108.

**Monteiro, R.**, Carrillo, J. & Aguaded, S. (2009). Guiones de acción de un profesor novel de ciencias a partir de la modelización de la enseñanza (Scripts of a novel science teacher obtained from a teaching modelisation). *Enseñanza de las Ciencias*, 27(1), 77-88.

**Monteiro, R.**, Carrillo, J. & Aguaded, S. (2008). Emergent Theorisations in Modelling the Teaching of Two Science Teachers. *Research in Science Education*, 38(3), 301-319.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2008). Uma perspectiva cognitiva para a análise de uma aula de matemática no 1.º Ciclo: Um exemplo de apresentação de conteúdo tendo como recurso o desenho no quadro. *Investigación en Educación Matemática XII*, 545-555. ISBN: 978-84-934488-9-9.

**Monteiro, R.**, Carrillo, J. & Aguaded, S. (2007). Análise cognitiva da prática do professor de ciências recorrendo à modelação do ensino. *Revista de Educação*, XV(1), 5-20.

#### Papers in Refereed Conference Proceedings

Ribeiro, C. M, Gonçalves, T., Quintas, H., **Monteiro, R.** & Fragoso, A. (2013). Multidimensional perspectives of non-traditional students and professors in the Universities of Aveiro and Algarve. Comunicação oral apresentada ao Non-traditional students in Higher Education: Looking beyond (in) success and dropout, University of Algarve, 31 janeiro-01 fevereiro.

Santos, C.S., **Monteiro, R.** & Ribeiro, C.M. (2012). Conhecimento das ciências para o ensino da célula: um estudo de caso instrumental. (Science knowledge for teaching about cell – an instrumental case study). Poster in the III Encontro Nacional de Educadores e de Professores do 1º e 2º CEB. 12-13Oct., Aveiro, Portugal.

Gonçalves, T., Quintas, H., Ribeiro, C. M., **Monteiro, R.**, Fragoso, A., Bago, J., Fonseca, H. M. A. C., & Santos, L. (2012). I'll never give up... Life stories of mature students in Higher Education. Comunicação oral apresentada à III ELOA Conference, Intergenerational solidarity and older adult's education in community, University of Ljubljana, Ljubljana, Eslovénia, 19-21 setembro.

Luís, M. & **Monteiro, R.** (2011). Conceptual progression hypothesis study about asexual reproduction and germination in plant reproduction. World conference on new trends in science education. 19-23 sept. 2011, Kusadasi, Turkey.

Luís, M. & **Monteiro, R.** (2011). Hipótese de Progressão Conceptual sobre a germinação e a reprodução assexuada no âmbito do estudo da reprodução nas plantas. (Conceptual Progression hypothesis about germination and asexual reproduction in the study of plants reproduction). Oral presentation in the XI Congresso da Sociedade Portuguesa de Ciências de Educação. 30 June to 2 July, Guarda, Portugal.

Santos, C. & **Monteiro, R.** (2011). Tipos de conhecimento de dois professores de ciências da natureza quando abordam o tema “A Célula” em sala de aula. (Types of knowledge of two science teachers when teaching about “The cell” in the classroom). Oral

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presentation in the XI Congresso da Sociedade Portuguesa de Ciências de Educação. 30 June to 2 July, Guarda, Portugal.

Santos, L., Fonseca, H., Bago, J., Gonçalves, T., Quintas, H., Ribeiro, C.M., **Monteiro, R.** & Fragoso, A. (2011). Estudantes maiores de 23 anos no ensino superior: a perspectiva da educação de adultos. Comunicação oral apresentada às III Jornadas de Educação e Formação de Adultos, Coimbra, Portugal, 3-4 Fevereiro.

Gonçalves, T., Ribeiro, C.M., Quintas, H., **Monteiro, R.**, Bago, J., Santos, L., Fonseca, H.M.A.C. & Fragoso, A. (2011). Projeto Estudantes Não-Tradicionais: procurar soluções para melhorar o sucesso académico. Comunicação oral apresentada ao Margem Sul Portuguesa, processos e equilíbrios, Faro, Portugal, 10 de Novembro.

Fragoso, A., Quintas, H., Ribeiro, C.M., **Monteiro, R.**, Gonçalves, T., Fonseca, H. M. A. C., Bago, J. & Santos, L. (2011). Navigating through higher education: mature students in transition. Comunicação oral apresentada ao Elderly, Education, Intergenerational Relationships and Social Development, Braga, Portugal, 25-27 Outubro.

Santos, L., Fonseca, H., Bago, J., Gonçalves, T., Quintas, H., Ribeiro, C.M., **Monteiro, R.** & Fragoso, A. (2011). Estudantes maiores de 23 anos no ensino superior: a perspectiva da educação de adultos. Comunicação oral apresentada às III Jornadas de Educação e Formação de Adultos, Coimbra, Portugal, 3-4 Fevereiro.

Fragoso, A., Quintas, H., Ribeiro, C.M., **Monteiro, R.**, Gonçalves, T., Fonseca, H. M. A. C., Bago, J. & Santos, L. (2011). Navigating through higher education: mature students in transition. In Veloso, E., Guimarães, P., Martins, F., Silva, D., & Faria, M. A. (Eds.), Elderly, Education, Intergenerational Relationships and Social Development. Proceedings of 2nd Conference of ELOA (pp. 98-109). Braga, Portugal: CIEd - Centro de Investigação em Educação, Instituto de Educação, Universidade do Minho.

Gonçalves, T., Fragoso, A., Ribeiro, C.M., **Monteiro, R.**, Quintas, H., Bago, J., Fonseca, H. & Santos, L. (2011). Who Are They? Making Non-Traditional Students Visible. Comunicação oral apresentada ao Positioning and Conceptualizing Adult Education and Learning within Local Development, Istambul, Turquia, 29-30 Abril.

Gonçalves, T., Fragoso, A., Ribeiro, C.M., **Monteiro, R.**, Quintas, H., Bago, J., Fonseca, H. & Santos, L. (2011). Who Are They? Making Non-Traditional Students Visible. In Positioning and Conceptualizing Adult Education and Learning within Local Development (pp. 271-280). Istanbul: Bogaziçi University Press.

Bago, J., Fonseca, H. M. A. C., Santos, L., Gonçalves, T., Fragoso, A., Ribeiro, C.M., **Monteiro, R.** & Quintas, H. (2011). Promoting success for Non-Traditional Students in Portugal – a preliminary diagnosis. In The challenge of Access, Retention and Drop-out in Higher Education in Europe: the experiences of non-traditional students, Sevilla, Spain, 7-8 abril.

Fragoso, A, Gonçalves, T., **Monteiro, R.**, Quintas, H., Ribeiro, C.M., Santos, L., Fonseca, H. & Bago, J. (2010). Non-traditional students in HEI: searching solutions to improve the academic success. Comunicação apresentada ao Environment, Economy & Society Research Colloquium, Faro, Portugal, 01 de Outubro.

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Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2010). Desarrollo profesional de una maestra de primaria. Introduciendo y discutiendo un modelo de análisis de desarrollo profesional. In M. M. Moreno, A. Estrada, J. Carrillo & T. A. Sierra, (Eds.), *Investigación en Educación Matemática XIV* (pp. 511-522). Universidade de Lleida, Spain: SEIEM, Universitat de Lleida. ISBN: 978-84-8409-321-3.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2010). Changes in teachers' goals and its influence in teaching. In Pinto, M. F. & Kawasaki, T. F. (Eds.). *Proceedings of the 34th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 2, p. 94. Belo Horizonte, Brazil: PME.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2010). Práticas comunicativas de uma professora de matemática. In actas do Encontro de Investigação em Educação Matemática (EIEM 2010) "Comunicação no ensino e na aprendizagem da matemática. Costa da Caparica, Portugal.

**Monteiro, R.**, Carrillo, J. & Agudaded, S. (2009). Os Scripts como elementos de reflexão para professores de Ciências. (The scripts as reflection elements to science teachers). Oral presentation in the XIII Encontro Nacional de Educação em Ciências. Educação e formação: ciência, Cultura e Cidadania, 24-26 Sept., Castelo Branco, Portugal. ISBN: 978-989-95831-2-2.

Gonçalves, C., Barros, J. & **Monteiro, R.** (2009). Concepções de Professores do 1º Ciclo do Ensino Básico: o que eles declaram antes de abordarem o conceito de Evaporação no âmbito do PFEEC. (Teachers beliefs in primary school: what do they declare before teaching about the evaporation concept? In the PFEEC context). Oral presentation at XIII Encontro Nacional de Educação em Ciências. Educação e Formação: Ciência, Cultura e Cidadania, 24-26 Sept., Castelo Branco, Portugal. ISBN: 978-989-95831-2-2.

Gonçalves, S., **Monteiro, R.** & Carmo, J. (2009). Concepções Declaradas dos Professores do 1º Ciclo do Ensino Básico, antes de abordarem o tema Evaporação. (Declared conceptions of primary teachers before evaporation). Poster in the XIII Encontro Nacional de Educação em Ciências. Educação e formação: ciência, Cultura e Cidadania, 24-26 Sept., Castelo Branco, Portugal. ISBN: 978-989-95831-2-2.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2009). Cognições do professor numa aula de matemática. VI Congreso Iberoamericano de Educación Matemática (VI CIBEM), Puerto Montt-Chile.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2009) De que nos informan los objetivos del profesor sobre su práctica? Análisis e influencia en la práctica de una maestra. *Investigación en Educación Matemática XIII*, Santander, Spain.

Ribeiro, C., **Monteiro, R.** & Carrillo, J. (2009). Professional knowledge in an improvisation episode: the importance of a cognitive model. Paper currentd at the CERME6, Lyon, France.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2009). Analyzing a teacher's practice from the relations between her cognitions. The contribution of a cognitive model to the understanding of what seems to be happening. In Tzekaki, M., Kaldrimidou, M. &

Sakonidis, H. (Eds.). Proceedings of the 33rd Conference of the International Group for the Psychology of Mathematics Education, Vol. 1, p. 455. Thessaloniki, Greece: PME.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2009). Tracking changes in the teaching practice: Introducing a professional development model. In Tzekaki, M., Kaldrimidou, M. & Sakonidis, H. (Eds.). Proceedings of the 33rd Conference of the International Group for the Psychology of Mathematics Education, Vol. 5, p. 490. Thessaloniki, Greece: PME.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2009). We teach what we know, but do we know what we teach? The practical “distinction” between squares and rectangles in a primary school class. In Jarmila Novotná e Hana Moraová (Eds.) Proceedings do International Symposium Elementary Maths Teaching (SEMT 09), (pp.204-212), Praga, República Checa: Charles University, Faculty of Education.

Ribeiro, C., Carrillo, J. & **Monteiro, R.** (2009). O conhecimento profissional em acção durante a exploração de um pictograma: uma situação de (i)literacia. In proceedings of XIX Encontro de Investigação em Educação Matemática – Números e Estatística: reflectindo o current, perspectivando o futuro (XIX EIEM). Vila Real: SEM-SPCE. ISBN: 978-972-8614-12-6.

Ribeiro, C., **Monteiro, R.** & Carrillo, J. (2009). Professional knowledge in an improvisation episode: the importance of a cognitive model. In Durand Guerrier, V., Soury-Lavergne, S. & Arzarello, F. (Eds), Proceedings of the 6th Conference of the European Society for Research in Mathematics Education (CERME6) (2030-2039). Lyon: ERME.