

Publikationer

Academic Staff's Motivation, Outcomes and Challenges in a Pedagogical Training Programme of PBL

Chen, J., Kolmos, A., Guerra, A. & Zhou, C., 2021, I: *International Journal of Engineering Education*. 37, 4, s. 900-914

Educate for the future: PBL, Sustainability and Digitalisation 2021

Guerra, A. (red.), Chen, J. (red.), Winther, M. (red.), Kolmos, A. (red.) & Nielsen, S. R. (red.), 2021, Aalborg Universitetsforlag. 230 s. (International Research Symposium on PBL).

Educating engineers 2030 – PBL, social progress and sustainability

Guerra, A. & Rodriguez, F., 2021, I: *European Journal of Engineering Education*. 46, 1, s. 1-3 3 s.

Foreword

Guerra, A., Chen, J., Winther, M., Kolmos, A. & Nielsen, S. R., 2021, *Educate for the future: PBL, Sustainability and Digitalisation 2021*. Aalborg Universitetsforlag, 1 s. (International Research Symposium on PBL).

Computer-aided curriculum analysis and design: Existing challenges and open research directions

Teixeira, A. M. H., Guerra, A. O. P. D. C., Knorn, S., Staffas, K. & Varagnolo, D., 21 okt. 2020, *2020 IEEE Frontiers in Education Conference, FIE 2020 - Proceedings*. IEEE Signal Processing Society, 9274292. (Proceedings - Frontiers in Education Conference, FIE, Bind 2020-October).

Best practice for embedding the united nations sustainable development goals in engineering education programs

Larsen, S. B., Flyger, C., de Carvalho Guerra, A. O. P. & Coral, J. S., 20 sep. 2020, *SEFI 48th Annual Conference Engaging Engineering Education, Proceedings*. van der Veen, J., van Hattum-Janssen, N., Jarvinen, H-M., de Laet, T. & Ten Dam, I. (red.). European Society for Engineering Education SEFI, s. 1411-1413 3 s. (SEFI 48th Annual Conference Engaging Engineering Education, Proceedings).

Educate for the future: PBL, Sustainability and Digitalisation 2020

Guerra, A. (red.), Chen, J. (red.), Winther, M. (red.) & Kolmos, A. (red.), 2020, 1. udg. Aalborg Universitetsforlag. 618 s. (International Research Symposium on PBL).

Educating Engineering Educators for Sustainability – a case of online resources for staff development

Holgaard, J. E., Smink, C. K., Guerra, A. O. P. D. C. & Servant, V. F. C., 2020, *Educate for the future: PBL, Sustainability and Digitalisation 2020*. Guerra, A., Kolmos, A., Winther, M. & Chen, J. (red.). 1 udg. Aalborg Universitetsforlag, s. 66-75 10 s. (International Research Symposium on PBL).

Foreword

Guerra, A., Chen, J., Winther, M. & Kolmos, A., 2020, *Educate for the future: PBL, Sustainability and Digitalisation 2020*. Guerra, A., Chen, J., Winther, M. & Kolmos, A. (red.). Aalborg Universitetsforlag, 1 s. (International Research Symposium on PBL).

PBL to foster integration of company projects in engineering curricula – A case example

Garmendia, M., Alberro, G. & Guerra, A. O. P. D. C., 2020, *Educate for the future: PBL, Sustainability and Digitalisation 2020*. Guerra, A., Kolmos, A., Winther, M. & Chen, J. (red.). 1 udg. Aalborg Universitetsforlag, s. 110-122 13 s. (International Research Symposium on PBL).

Preparing engineering students for collaborative project-work: Piloting an online course on PBL and project management

Guerra, A. O. P. D. C., Schoefs, F. & Chevreuil, M., 2020, *Educate for the future: PBL, Sustainability and Digitalisation 2020*. Guerra, A., Kolmos, A., Winther, M. & Chen, J. (red.). 1 udg. Aalborg Universitetsforlag, s. 30-42 13 s. (International Research Symposium on PBL).

Using different taxonomies to formulate learning outcomes to innovate engineering curriculum towards PBL: perspectives from engineering educators

Staffas, K., Knorn, S., Guerra, A. O. P. D. C., Varagnolo, D. & Teixeira, A., 2020, *Educate for the future: PBL, Sustainability and Digitalisation 2020*. Guerra, A., Kolmos, A., Winther, M. & Chen, J. (red.). 1 udg. Aalborg Universitetsforlag, s. 310-320 11 s. (International Research Symposium on PBL).

Examining exemplarity in problem-based engineering education for sustainability

Servant, V. F. C. & Guerra, A. O. P. D. C., 16 sep. 2019, *Varietas delectat...Complexity is the new normality: SEFI 47th Annual Conference Proceedings*. Vince Nagy, B., Murphy, M., Järvinen, H-M. & Kálmán, A. (red.). SEFI: European Association for Engineering Education, s. 1022-1032 11 s.

Sustainable Industry 4.0

Guerra, A. O. P. D. C. & Nørgaard, B., 16 sep. 2019, *Varietas delectat...Complexity is the new normality : Proceedings SEFI 2019*. Vince Nagy, B., Murphy, M., Järvinen, H-M. & Kálmán, A. (red.). SEFI: European Association for Engineering Education, s. 501-510 10 s.

Contextual Learning for Sustainability

Guerra, A. O. P. D. C. & Holgaard, J. E., 2019, *Encyclopedia of Sustainability in Higher Education*. Leal Filho, W. (red.). Springer

Students' Perspectives on Sustainability

Guerra, A. O. P. D. C. & Smink, C. K., 2019, *Encyclopedia of Sustainability in Higher Education*. Leal Filho, W. (red.). Springer

Aalborg UNESCO Certificate: Staff Development and Challenges in PBL Training Programme

Chen, J., Kolmos, A., Guerra, A. O. P. D. C. & Zhou, C., 2019, I: *Journal of Engineering Education Transformations (JEET)*. 33, 1, 8 s.

7th International Research Symposium on PBL: Innovation, PBL and Competences in Engineering Education

Sunyu, W. (red.), Kolmos, A. (red.), Guerra, A. (red.) & Weifeng, Q. (red.), 2018, Aalborg Universitetsforlag. 615 s. (International Research Symposium on PBL).

Academic staff expectations when enrolling in pedagogical development course for curriculum change

Guerra, A. & Spliid, C. C. M., 2018, *7th International Research Symposium on PBL: Innovation, PBL and Competences in Engineering Education*. Sunyu, WANG., KOLMOS, A., GUERRA, A. & Weifeng, QIAO. (red.). Aalborg: Aalborg Universitetsforlag, s. 562-572 11 s. (International Research Symposium on PBL).

Engineering 2030: Conceptualization of Industry 4.0 and its implications for Engineering Education

Nørgaard, B. & Guerra, A. O. P. D. C., 2018, *7th International Research Symposium on PBL : Innovation, PBL and Competences in Engineering Education*. Sunyu, WANG., KOLMOS, A., GUERRA, A. & Weifeng, QIAO. (red.). Aalborg, Danmark: Aalborg Universitetsforlag, s. 34-47 (International Research Symposium on PBL).

Aalborg UNESCO Centre Certificate: A new approach to staff training and curriculum innovation

Guerra, A., Spliid, C. C. M. & Kolmos, A., 2018, *7th International Research Symposium on PBL: Innovation, PBL and Competences in Engineering Education*. Sunyu, WANG., KOLMOS, A., GUERRA, A. & Weifeng, QIAO. (red.). Aalborg: Aalborg Universitetsforlag, s. 573-585 13 s. (International Research Symposium on PBL).

Introduction

Ulseth, R. & Guerra, A., 13 sep. 2017, *PBL in Engineering Education: International Perspectives on Curriculum Change*. Brill | Sense, s. vii-x

PBL in engineering education: International perspectives on curriculum change

Guerra, A., Ulseth, R. & Kolmos, A., 13 sep. 2017, Brill | Sense. 140 s.

Empowering students to co-construct the PBL environment

Holgaard, J. E., Dahms, M. L., Kolmos, A. & Guerra, A., 3 jul. 2017, *6th International Research Symposium on PBL: PBL, Social Progress and Sustainability*. Aalborg Universitetsforlag, s. 386 – 398 12 s. (International Research Symposium on PBL).

PBL and Engineering Curriculum Change in Latin America: 10 examples and the lessons learned

Guerra, A., Rodríguez-Mesa, F. & González, F., 3 jul. 2017, *6th International Research Symposium on PBL: PBL, Social Progress and Sustainability*. Aalborg Universitetsforlag, s. 268 – 278 10 s. (International Research Symposium on PBL).

Aprendizaje basado en problemas en ingeniería: Teoría y práctica

Rodríguez-Mesa, F. (red.), Kolmos, A. (red.) & Guerra, A. (red.), 2017, Aalborg: Aalborg Universitetsforlag. 276 s.

Aprendizaje basado en problemas y educación en ingeniería: Panorama latinoamericano

Guerra, A. (red.), Rodríguez-Mesa, F. (red.), González, F. A. (red.) & Ramírez, M. C. (red.), 2017, Aalborg: Aalborg Universitetsforlag. 240 s.

Control del problema en un entorno de PBL

Holgaard, J. E., Petersen, L. S., Guerra, A. & Kolmos, A., 2017, *Aprendizaje basado en problemas en ingeniería: Teoría y práctica*. Rodríguez-Mesa, F., Kolmos, A. & Guerra, A. (red.). Aalborg Universitetsforlag, s. 130-167 37 s.

Engineering grand challenges and the attributes of the global engineer: a literature review

Guerra, A., Ulseth, R., Jonhson, B. & Kolmos, A., 2017, *Proceedings of the 45th SEFI Annual Conference 2017: Education Excellence for Sustainability*. Quadrado, J. C., Bernardino, J. & Rocha, J. (red.). Belgium : SEFI: European Association for Engineering Education, s. 1222-1235

Getting a hold on the problem in a problem-based learning environment

Holgaard, J. E., Guerra, A., Kolmos, A. & Petersen, L. S., 2017, I: *International Journal of Engineering Education*. 33, 3, s. 1070-1085

Guest Editorial I

Arana Arexolaleiba, N., Guerra, A., Kolmos, A., de Graaff, E. & Lima, R. M., 2017, I: *International Journal of Engineering Education*. 33, 3, s. 940-941

Integration of Sustainability in Engineering Education: Why is PBL an answer?

Guerra, A., 2017, I: *International Journal of Sustainability in Higher Education (Print Edition)*. 18, 3, s. 436-454

Los cambios hacia el PBL: Lecciones aprendidas

Guerra, A., Rodríguez-Mesa, F. & González, F. A., 2017, *Aprendizaje basado en problemas y educación en ingeniería: Panorama latinoamericano*. Guerra, A., Rodríguez-Mesa, F., González, F. A. & Ramírez, M. C. (red.). Aalborg Universitetsforlag, s. 212-225 14 s.

PBL in Engineering Education: International Perspectives on Curriculum Change

Guerra, A. (red.), Ulseth, R. (red.) & Kolmos, A. (red.), 2017, Rotherdam: Brill | Sense. 152 s.

PBL, Social Progress and Sustainability

Guerra, A. (red.), Rodríguez, F. J. (red.), Kolmos, A. (red.) & Reyes, I. P. (red.), 2017, 1. udg. Aalborg: Aalborg Universitetsforlag. (International Research Symposium on PBL).

Perspectives on Engineering Curriculum Change

Guerra, A. & Ulseth, R., 2017, *PBL in Engineering Education: International Perspectives on Curriculum Change*. Guerra, A., Ulseth, R. & Kolmos, A. (red.). Rotherdam: Brill | Sense, s. 119-134

Principios de aprendizaje y organización curricular en el PBL

Guerra, A., Rodríguez Mesa, F. & González, F. A., 2017, *Aprendizaje basado en problemas y educación en ingeniería: Panorama latinoamericano*. Guerra, A., Rodríguez-Mesa, F., González, F. A. & Ramírez, M. C. (red.). Aalborg Universitetsforlag, s. 2-18 17 s.

"Revolución" en la educación de ingeniería: ¿Cómo puede contribuir PBL?

Guerra, A. & Rodríguez Mesa, F., 2017, *Aprendizaje basado en problemas en ingeniería: Teoría y práctica*. Rodríguez-Mesa, F., Kolmos, A. & Guerra, A. (red.). Aalborg: Aalborg Universitetsforlag, s. 1-11 11 s.

Sustainability accreditation in Engineering Education: Comparison between Danish and French contexts

Guerra, A., Holgaard, J. E. & Jolly, A. M., 2017, *Proceedings of the 45th SEFI Annual Conference: Education Excellence for Sustainability*. Quadrado, J. C., Bernardino, J. & Rocha, J. (red.). SEFI: European Association for Engineering Education, s. 137-144

Trends in Engineering Education Research: A systematic database analysis

Rodriguez-Mesa, F., Guerra, A., de Graaff, E. & Peña-Reyes, I., 2017, *7th Research in Engineering Education Symposium*. Curran Associates, Inc, Bind 2. s. 835-844

Barriers towards Sustainability Integration in Engineering Education

Guerra, A., Holgaard, J. E. & Smink, C. K., 2016, *Proceedings for the 8TH conference on engineering education for sustainable development (EESD), 2016, Bruges, Belgium..*

Enhancing Critical Thinking in a PBL Environment

Guerra, A. & Holgaard, J. E., 2016, I: *International Journal of Engineering Education*. 32, 1(B), s. 424-437

Organisational learning and integration of sustainability in engineering education

Guerra, A. & Holgaard, J. E., 2016, *Proceedings SEFI Annual Conference 2016, Tampere, Finland..* European Society for Engineering Education SEFI

Strategies for education for sustainable development - Danish and Australian perspectives

Holgaard, J. E., Hadgraft, R., Kolmos, A. & Guerra, A., 2016, I: *Journal of Cleaner Production*. 112, 4, s. 3479-3491 13 s.

Development of a Global Network for PBL and Engineering Education

Guerra, A. & de Graaff, E., 2015, *Global Research Community: Collaboration and Developments*. de Graaff, E., Guerra, A., Kolmos, A. & A. Arexolaleiba, N. (red.). Aalborg Universitetsforlag, s. 257-266 9 s.

Global Research Community: Collaboration and Developments

de Graaff, E. (red.), Guerra, A. (red.), Kolmos, A. (red.) & Arexolaleiba, N. (red.), 2015, 1 udg. Aalborg Universitetsforlag. 537 s.

How to make Engineering Students master problem identification and problem formulation

Guerra, A. & Bøgelund, P., 2015, *Active Teachers - Active Students: Proceeding of The International Joint Conference on the Learner in Engineering Education (IJCLEE' 2015) and 13th Active Learning in Engineering Education Workshop (ALE)*. de Graff, E., Farreras, M. & Arexolaleiba, N. A. (red.). Aalborg Universitetsforlag, s. 77-81

Problem Based Learning: The Aalborg Example: The visitors workshop at AAU

de Graaff, E. & Guerra, A., 2015. 1 s.

Use of ICT tools to manage project work in PBL environment

Guerra, A., 2015, *Global Research Community: Collaboration and Developments*. de Graaff, E., Guerra, A., Kolmos, A. & A. Arexolaleiba, N. (red.). Aalborg Universitetsforlag, s. 445-455 10 s.

Problem Based Learning and Sustainable Engineering Education: Challenges for 21st Century

Guerra, A., 4 jun. 2014, Department of Development and Planning, Aalborg University. 439 s.

Problem Based Learning and Sustainability: Practice and Potential

Krogh Hansen, K., Dahms, M-L., Otrell-Cass, K. & Guerra, A., maj 2014, Faculty of Engineering and Science, Aalborg University. 136 s.

Good Examples Catalogue: "Problem Based Learning and Sustainability in Engineering and Science Education – Practice and Potential"

Krogh Hansen, K., Otrell-Cass, K., Guerra, A. & Dahms, M-L., apr. 2014, Faculty of Engineering and Science, Aalborg University. 60 s.

Sustainability in engineering education from a programme perspective

Kolmos, A., Guerra, A., Haase, S. & Møller, S., 1 jan. 2013.

Evaluating potentialities and constrains of Problem Based Learning curriculum: Research methodology

Guerra, A., 2013, *PBL Across Cultures*. Mohd-Yusof, K., Arsat, M., Borhan, M. T., de Graaff, E., Kolmos, A. & Phang, F. A. (red.). Aalborg: Aalborg Universitetsforlag, s. 238-244

Information technology for sustainable development: a problem based and project oriented approach

Holgaard, J. E., Guerra, A., Knoche, H., Kolmos, A. & Andersen, H. J., 2013, *Re-Thinking the Engineer*. Engineering Education for Sustainable Development 2013, University of Cambridge, UK, 8 s. 21

Project-organized learning and the development of competences in Engineering Education for Sustainable Development

Guerra, A., Holgaard, J. E. & Kolmos, A., 2013, *Proceedings of ERSCP-EMSU 2013*. 21 s.

Student's perspectives on Education for Sustainable Development in a problem based learning environment

Guerra, A. & Holgaard, J. E., 2013, *Re-Thinking the Engineer*. Engineering Education for Sustainable Development 2013, University of Cambridge, UK, 33

Problem Based Learning and Education for Sustainable Development: An overview in Engineering Education

Guerra, A., 2 jul. 2012, *EDULEARN12 Proceedings*. International Association of Technology, Education and Development (IATED), s. 557-565 (EDULEARN Proceedings).

What are the common knowledge & competencies for Education for Sustainable Development and for Engineering Education for Sustainable Development?

Guerra, A., 2012, *Engineering Education 2020: Meet the Future: SEFI 40th annual conference*. SEFI: European Association for Engineering Education, 8 s.

What are the common knowledge & competencies for education for sustainable development and for Engineering education for sustainable development?

Guerra, A., 2012, *Proceedings of the 40th SEFI Annual Conference 2012 - Engineering Education 2020: Meet the Future*. European Society for Engineering Education SEFI, (Proceedings of the 40th SEFI Annual Conference 2012 - Engineering Education 2020: Meet the Future).

Assessing Learning Outcomes and Engineering PBL Project Reports

Guerra, A. & Kolmos, A., 2011. 7 s.

Comparing problem based learning models: suggestions for their implementation

Guerra, A. & Kolmos, A., 2011, *PBL across the disciplines: Research into best practice*. Davies, J., de Graaff, E. & Kolmos, A. (red.). Aalborg: Aalborg Universitetsforlag, s. 3-17

A Aprendizagem Baseada na Resolução de Problemas e a Reabilitação das Ribeiras de Gaia: Um estudo de Avaliação

Guerra, A. & Vasconcelos, C., 2009, *Acta - XIII Encontro Nacional de Educação em Ciências*. Castelo Branco-Portugal: Escola Superior de Educação, Instituto Politécnico de Castelo Branco, s. 1100-4521

Aprendizagem Baseada na Resolução de Problemas e a reabilitação de cursos de água

Guerra, A., Espinha Marques, J. & Vasconcelos, C., 2009, I: Enseñanza de las Ciencias. Número Extra - VIII Congreso Internacional sobre Investigación en Didáctica de las Ciencias, s. 1089-1097

Aprendizagem Baseada na Resolução de Problemas e Construção de Materiais Didáticos: Reflexões sobre um estudo de avaliação

Guerra, A. & Vasconcelos, C., 2009, I: Electronic Journal CAPTAR.

Aprendizagem Baseada na Resolução de Problemas: A Reabilitação das Ribeiras de Gaia

Guerra, A. & Vasconcelos, C., 2008, *Actas del XV Simpósio sobre Enseñanza de la Geología. Cuadernos del Museo Geominero*. Calongue, A., Rebollo, L., López-Carrillo, M. D., Rodrigo, A. & Rábano, I. (red.). Instituto Geológico y Minero de España, Bind 11. s. 225-232

Aprendizagem Baseada na Resolução de Problemas: construção de materiais didáticos sobre a problemática ambiental das Ribeiras de Gaia

Guerra, A., 2008, 300 s. Department of Geology, Faculty of Science, University of Porto.

Projekter

Integration of Sustainable Development in Engineering Education

Guerra, A. O. P. D. C. & Holgaard, J. E.

31/03/2015 → 31/03/2018

Retention and Drop out amongst 1 year bachelor students at the Faculty for Engineering and Science

Bøgelund, P., Kolmos, A., Bylov, S. M. & Guerra, A. O. P. D. C.

01/08/2015 → 01/07/2016

The ECIU University

Guerra, A. O. P. D. C.

01/11/2020 → 31/10/2022