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New technologies and redesigning learning spaces

Book of Abstracts

eLearning and Software for Education Conference

Bucharest, April 11 – 12, 2019

Publisher:

"CAROL I" National Defence University Publishing House

Director: Gheorghe MINCULETE

Panduri Street, 68-72

Bucharest

Phone: +40213194880

ISSN 2360 – 2198

ISSN-L 2360 – 2198

Further information on all eLearning and Software for Education – eLSE – events can be found at:

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**The 15th International Scientific Conference
“eLearning and Software for Education”**

New technologies and redesigning learning spaces

Book of Abstracts

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CONTENTS

Exploring the Use of Gamified Systems in Training and Work Environments	21
Ioana Andreea ȘTEFAN, Antoniu ȘTEFAN, Ioana Raluca GOLDBACH, Felix HAMZA-LUP	
Learning Object-Oriented Programming by Creating Games	21
Ladislav VÉGH, Veronika STOFFOVÁ	
Story-Oriented Learning	22
Antoniu ȘTEFAN, Ioana Andreea ȘTEFAN, Jannicke BAALSRUD HAUGE, Jackie CALDERWOOD, Jayne BEAUFOY, Sylvester ARNAB, Michael LOIZOU	
Educational Computer Games in Programming Teaching and Learning	23
Veronika STOFFOVÁ	
Autonomous Driving in Games	23
Ioan-Alexandru BRATOSIN, Ionel-Bujorel PĂVĂLOIU, Nicolae GOGA, George DRĂGOI	
Visual Function Testing and Training for Children with Different Visual Impairments, by Using a Software Interface, Serious Game Type for Laptop and Tablet	24
Barbu Cristian BRAUN, Mihaela Ioana BARITZ	
Improving Training Methods for Industry Workers through AI Assisted Multi-Stage Virtual Reality Simulations	24
Alexandru BUTEAN, Marco Leon OLESCU, Nicolae Adrian TOCU, Adrian FLOREA	
Learning Enhancement Through Video Games	25
Nicoleta CĂLINOIU (ION)	
Serious Games in Engineering Education	26
Elizaveta CHACHANIDZE	
A Gamified Intervention Combining CBM-I and Social Skills Training for Children with Aggressive Behavior: Proof of Concept	26
Alina Cristina CHIVU, Cătălin NEDELCEA	
A Computerized, Gamified Intervention Training Visual Perspective-Taking. Theoretical Rationale and Proposal of a Randomized Controlled Trial	27
Ana Maria COSMOIU, Cătălin NEDELCEA, Ioana Roxana PODINA	
Hit by Weibull: Play to Learn Now!	28
Corina GROSU, Marta GROSU	

Rationale and Development of a Proof of Concept Gamified mHealth Attention Training App Towards Healthy Food Cues	28
Ioana PODINA, Ana TOMA, Ana Maria COSMOIU	
A Playful form of Teaching and Learning using Micro-World Applications	29
Veronika STOFFOVÁ, Krisztina CZAKÓOVA	
Digital Badges at NATO School Oberammergau.....	30
Gigi ROMAN, Tanja GEISS, Remi TREMBLAY	
E-Learning Tools for IT Project Teams.....	30
Ileana Ruxandra BRADAU (BADEA)	
Future Studies, Forecast and Foresight - Critical Considerations and Relevant Findings	31
Stefan-Antonio DAN-SUTEU, Graziano GIORGI	
Models and Theories of Unethical Use of Information Technology in Higher Education	31
Liliana MĂȚĂ, Roxana Maria GHIAȚĂU, Alexandra Georgiana POENARU, Ioana BOGHIAN	
Considerations for Specialist Training in the Field of Critical Infrastructures Protection	32
Daniel ROMAN	
A Full Spectrum Lifelong e-Learning Project for the Army.....	33
Enrico SPINELLO, Gianluca TORBIDONE, Marina MARCHISIO, Sergio RABELLINO	
ADREM: System Call Based Intrusion Detection Framework.....	33
Jan-Alexandru VĂDUVA, Radu-Emanuel CHIȘCARIU, Ioana CULIC, Iulia-Maria FLOREA, Răzvan RUGHINIȘ	
Semantic Author Recommendations Based on their Biography from the General Romanian Dictionary of Literature	34
Laurențiu-Marian NEAGU, Teodor-Mihai COTET, Mihai DASCĂLU, Ștefan TRĂUȘAN-MATU, Laura BADESCU, Eugen SIMION	
LibQuest - Revitalize Libraries and Reading Through Gamification	35
Maria Anca BĂLUȚOIU, Alexandru GRĂDINARU, Alin MOLDOVEANU, Florica MOLDOVEANU, Anca MORAR, Ana-Karina NAZARE, Mireille RĂDOI	
Romanian TreeAnnotator	35
Daniela GÎFU	
A Survey on History, Present and Perspectives of Document Image Analysis Systems.....	36
Iulia-Cristina STĂNICĂ, Costin-Anton BOIANGIU, Giorgiana Violeta VLĂSCLEANU, Marcel PRODAN, Cristian AVATAVULUI, Răzvan-Adrian DEACONESCU, Codrin TĂUT	

28	Collaborative Object Recognition for Parking Management	37
	Cristian VASILESCU, Cristian BECEANU, Ijaz HUSSAIN	
29	Designing a Document Image Analysis System on 3 Axis: Education, Research and Performance	37
30	Giorgiana Violeta VLĂSCEANU, Costin-Anton BOIANGIU, Răzvan-Adrian DEACONESCU, Marcel PRODAN, Cristian AVATAVULUI, Răzvan RUGHINIȘ, Irina MOCANU	
30	Virtual Interaction for Visually Impaired and Sighted People	38
	Silviu IVASCU, Alin MOLDOVEANU, Florica MOLDOVEANU, Anca MORAR, Oana BALAN	
31	On Using ADDIE/SAMR Methodology to Improve the Performance in Blended Learning	38
	Grigore ALBEANU, Florin POPENTIU-VLADICESCU	
31	A Novel Free Cloud Service for Machine Learning and Beyond	39
	Alin Adrian ALECU, Bujor Ionel PAVALOIU, Ciprian Gabriel DOBRE-TRIFAN	
32	Developed a Hardware and Software Application to Monitor Eye Movements and Evaluate the Visual Field	40
	Mihaela Icana BARITZ, Barbu Cristian BRAUN	
33	Modern Procedure for Applicative Teaching, by Using a Flexible Software Interface for Simulation of Some Optical Phenomena	41
	Barbu Cristian BRAUN	
33	Laboratory of Things: Virtual Laboratory for Signal Processing Experiments	41
	Corina CÎMPANU, Robert-Gabriel LUPU, Florina UNGUREANU	
4	Teaching Computer Engineering Concepts to Non-Technical Students	42
	Ioana CULIC, Alexandru RADOVICI, Jan Alexandru VADUVA	
5	New technologies in medical education: The Potential of Video Resources – YouTube Channeling	42
	Cristina Gena DASCALU, Vasile Lucian BOICULESE, Mihaela MOSCALU, Magda Ecaterina ANTOHE	
5	NTC (Nikola Tesla Center) Camp and Information and Communication Technologies – Kids Evaluation of Innovative Learning Techniques	43
	Andrea DEBELJUH, Maja RUŽIĆ BAF, Ranko RAJOVIĆ	
6	Using a Web-Based Framework to Build and Experiment with Virtual Reality Worlds	44
	Andrei George FLOREA, Cătălin BUIU	
	A Review of Eye Tracking in Elearning	44
	Alexandra HUȚANU, Patricea Elena BERTEA	

AdABI: an Adaptive Assessment System Based on Bayesian Inference	45
Anata-Flavia IONESCU, Dragoş SBURLAN	
The Impact of the Virtual Assistant (VA) on Language Classes	45
Ana Mihaela ISTRATE	
Comparison Between Assisted Training and Classical Training in Nonformal Learning Based on Automatic Attention Measurement Using a Neurofeedback Device	46
Dan MUNTEANU, Nicoleta MUNTEANU	
Implicit Evaluation of Chess Knowledge in Non-Formal Learning Using Automatic Image Processing and Deep Learning	47
Dan MUNTEANU, Nicoleta MUNTEANU	
The Integration of IoT Projects in Undergraduate Education	48
Marin OPREA	
The Role of Disgust and Fear in the Educational Environment: Theoretical Aspects and Proposal of a Computerized Intervention	48
Simona Alexandra PASCAL, Cătălin NEDELCEA, Ioana Roxana PODINA	
A Very Practical Approach for System Engineering Curriculum	49
Mihail PASCU, Radu Nicolae PIETRARU, Adriana OLTEANU, Maximilian NICOLAE	
Providing Semantically-Enabled Information for SmES knowledge workers: Multi-agent-based middleware	49
Ramona Cristina POPA, Bujor PAVALOIU, Nicolae GOGA	
E-business Learning Tool for Online Banking Based on BPM (Business Process Management)	50
Radu RĂDESCU, Tudor ARDELEAN	
Study Platform for Complex Data Analysis of Telecommunications and Social Network Applications Using Business Intelligence	51
Radu RĂDESCU, Valentin MURARU	
Development and Validation of a Multimedia Instructional Package for Teaching Basic Electronic Devices at Upper Basic Education Level	52
Mustapha Sumaila SANI, Bello HASSAN	
Applying Kolmogorov Complexity for High Load Balancing Between Distributed Computing System Nodes	52
Maria STEPANOVA	
Finding General Guidelines for Redesign of Learning Spaces	53
Robin STØCKERT, Piet VAN DER ZANDEN, Duncan PEBERDY	
Mobile Application and Wi-Fi Network Security for e-Learning Platforms	54
George SUCIU, Muneeb ANWAR, Cristiana ISTRATE	

5	Strategic Technologies: Innovation in Higher Education in Romania	54
	Luiza-Maria TURLACU (LAZAR), Gheorghe ORZAN, Raluca-Giorgiana CHIVU, Tania HERREZEEL	
5	Teaching Object Oriented Programming by Visual Devices	55
	József UDVAROS	
6	Methods of Artificial Intelligence in Economical and Logistical Education	55
	József UDVAROS, Ákos GUBÁN, Miklós GUBÁN	
7	The potential of City Information Modeling (CIM) in Understanding and Learning from the Impact of Urban Regulations on Residential Areas in Romania	56
	Teodora UNGUREANU	
8	Visual Tool for Learning GPU Programming	57
	Alexandru Mihai VULCAN, Maximilian NICOLAIE, Radu Nicolae PIETRARU	
8	A System for Modelling and Visualizing Processor State During Code Execution	57
	Alexander YERMAKOV, Iurii STROGANOV	
9	An Object-Oriented Reasoner for Saturation of Logical Knowledge Bases	58
	Andrei ZAMFIRA	
9	Using the Activity Theory to Identify the Challenges of Designing Elearning Tools based on Machine Learning for Security Operations Centers	59
	Mihail CAZACU, Constanța BODEA, Maria-Iuliana DASCĂLU, Cristian CUCU	
0	A Quantitative Research for Determining the Medical User's Interest and Interact with E-Learning in the Medical Social Media System Targeted for the Iraqi Environment	59
	Sarmad Monadel Sabree AL-GAYAR, Mohammed Safaa Mohamed SHUBBER	
1	E-School Management System Based on Satellite IMT-Advanced Technology	60
	Naseer Abdulkarim Jaber AL-HABEEB, Sarmad Monadel Sabree AL-GAYAR	
2	Didactic Instrument Developed in Geogebra for the Determination of the Coordinates of an Earthquake Based on an Inquiry Based Learning Method	61
	Fabiola-Sanda CHIRIACESCU, Bogdan CHIRIACESCU, Cristina MIRON	
2	The Impact of E-Learning on the Future Job Market – Predicting a New Educational Type of Learning Style for The Next Generations	61
	Alexandru DARIE, Roxana POSTELNICU, Cezar SCARLAT	
3	Relearning Life: A Study on Learning Experience and Life Satisfaction while Recovering	62
	Cristiana LOTREA, Adriana Sarah NICA, Ilinca Brîndușa MITOIU	
4	Treatment Assignment Based on Automatic Learning for the Pregnant Women Suffering from Preeclampsia	63
	Iuliana MARIN, Nicolae GOGA	

E-Learning to Support Online Training in Software Project Management for Better Work-Life Balance	63
Roxana POSTELNICU, Alexandru DARIE, Cezar SCARLAT, Elena Laura TRIFAN	
Developing Intercultural Competences by Means of a Technology-Mediated Learning Model	64
Roxana Anca TROFIN	
Improving Patient Education and the Transition Process Using Virtual Reality	65
Tamara VAGG, Sabin TABIRCA, Cathy SHORTT, Claire FLEMING, Barry PLANT	
The Role of an Advanced Computing Environment in Teaching and Learning Mathematics through Problem Posing and Solving	65
Marina MARCHISIO, Alice BARANA, Alberto CONTE, Cecilia FISSORE, Francesco FLORIS, Anna BRANCACCIO, Claudio PARDINI	
Student Perception and Learning in On-line Learning Platforms	66
Cristian BUCUR, Ionela SERBAN	
Applying the Principles of Didactics to the e-Learning Teaching of Astronomy and Astrophysics	67
Afrodita Liliana BOLDEA	
Enhancing Self-Regulation Skills in E-Learning Environments	67
Maria CANȚER	
Innovative Technology in the Language Class-Learning by Laughing, with Memes Under Focus	68
Yolanda-Mirela CATELLEY	
E-learning Market in Romania	69
Monica CONDRUZ-BACESCU	
The Impact of Digital Technologies on Learning	69
Monica CONDRUZ-BACESCU	
Smart Education in Smart City and Student Model	70
Mario DUMANČIĆ	
The Use of e-Learning Techniques in PR Training	71
Mirela IONIȚĂ, Veronica PĂSTAE,	
Developing Professional Vision: an On-line Course of Adlerian Classroom Management for Pre-service Teachers	71
Zlatica JURSOVÁ ZACHAROVÁ, Lenka SOKOLOVÁ,	
Digital Support of Developing Narrative Competence Among Children from Excluded Rural Communities in Slovakia	72
Zlatica JURSOVÁ ZACHAROVÁ	

63	Numerals in Model of Human Knowledge Representation	72
	Sergey KRESTOV, Iurii STROGANOV, Alyona LOGINOVA	
64	Psychological Implications of e-Learning Processes	73
	Elena MUSEANU, Roxana BÎRSANU	
65	Students' Strategies for Studying Romanian in E-Learning Times	74
	Cristina Mihaela NISTOR	
65	Feedback as a Powerful Teaching Tool: Online Versus Face-to-Face	74
	Cristina Mihaela NISTOR, Doina COMANETCHI	
66	The Dark Side of Digitalization: Information and Communication Technology Influence on Human Learning Processes	75
	Ana-Maria Gabriela PETRAȘUC, Daniela POPESCU	
66	Perspectives about New Learning Environments: eLearning Technologies	75
	Ionuț-Claudiu POPA	
67	Digital Literacy in the Area of e-Safety among Teachers (Second Stage of the Primary School) in Poland	76
	Lukasz TOMCZYK	
67	An Interdisciplinary Research: USTEAM Approach & BWG Assessment in Online Courses	76
	Nazime TUNCAY	
68	Distance Learning Technologies with Mentally Disabled People	77
	Olga VOLKOVA, Anastasia BEMBENA, Yuliya ARTYOMOVA	
69	Risks of Socio-Psychological Adaptation of Disabled Wheelchair User in New Distance Learning Environments	78
	Olga VOLKOVA, Anastasia BEMBENA, Yuliya ARTYOMOVA	
69	Virtual Class (Videoconference)	78
	Andrei GĂITĂNARU	
70	Development of the Distance Learning Programs for Staff Development	79
	Polina ANANCHENKOVA, Victoriya TONKONOG, Andrey GORYAINOV	
71	Students PowerPoint Presentations as Assessment Tool for Learning Evaluation	80
	Alina BALAGIU, Dana ZECHIA, Marioara PATESAN	
71	E-Learning - Facilitator Tool for the Development of Technological Entrepreneurship	80
	Cătălin-George ALEXE, Cătălina-Monica ALEXE	
72	Teachers' Needs and Readiness for Employing OER – A Survey within the Romanian Primary and Secondary Education Context	81
	Petre BOTNARIUC, Speranța ȚIBU	

Social Variables of Cyber Security Educational Programmes	81
Ella Magdalena CIUPERCĂ, Victor VEVERA, Carmen CÎRNU,	
Heterogeneity of Students' Perceptions of e-Learning Platform Quality: a Latent Profile Analysis	82
Irina CRISTESCU, Alexandru BALOG	
Authentication Based on Ocular Retina Recognition in eLearning Systems	83
Robert-Mădălin CRISTESCU	
Current Technologies and Trends in Cybersecurity and the Impact of Artificial Intelligence	83
Cristian CUCU, Gheorghe GAVRIOLOAIA, Razvan BOLOGA, Mihail CAZACU	
Modern Techniques on Learning Strategies Supported by Data Mining Analysis	84
Andrei Ștefan DULUȚĂ, Ștefan MOCANU, Daniela SARU, Radu Nicolae PIETRARU, Mihai CRĂCIUNESCU	
Redesigning Contemporary Learning in Literature, History and Culture through Online Learning Environments	85
Aleksandr FADEEV	
Information Society, Knowledge Society	85
Andrei GĂITĂNARU	
Learning, the Best Way to Teach Ecodesign	86
<u>Georgeta HARAGA</u> , Florin-Felix RADUICA, Ionel SIMION	
Considering Student Voice in Course Co-Design Process	86
Ionela MANIU, Cristina RAULEA, George MANIU	
Prevention and Detection of Plagiarism in Elaboration of Bachelor's Work by Students	87
Ioan MITREA	
Extend Learning Space with the Smartphone for Students at Hung Yen University of Technology and Education, Vietnam	88
Huu Hop NGUYEN, Thi Cuc NGUYEN	
Learning Database Queries with Prolog	88
Ekaterina OREHOVA, Sergey GOVYAZIN, Iurii STROGANOV	
Promoting Cybersecurity Culture through Education	89
Petrișor PATRAȘCU	
Developing Teaching and Learning Resources for Food Safety Disciplines – A Case Study	89
Dana RADU	

81	Applications of Machine Learning in Malware Detection	90
	Jan-Alexandru VADUVA, Vlad-Raul PASCA, Iulia-Maria FLOREA, Razvan RUGHINIS	
82	Use of Assistive Technologies in Accessibility of Information for Students with Visual Impairments	90
	Valentina VARTIC, Emilia OPRISAN	
83	Knowledge and Use of Plagiarism Detection Programs in Academic Work by Students	91
	Valentina VARTIC, Emilia OPRISAN	
83	High Impact Cybersecurity Capacity Building	92
	Julia NEVMERZHITSKAYA, Elisa NORVANTO, Csaba VIRAG	
84	“Digital Storytelling” in Teaching: Lessons Learned at WUT	92
	Gabriela GROSSECK, Dana CRĂCIUN, Mădălin BUNOIU	
85	The Role of Technology Leadership: Innovation for School Leadership in Digital Age	93
	Umut AKCIL, Zehra ALTINAY, Gökmen DAGLI, Fahriye ALTINAY	
85	Developing at a Great Pace: Studies on Artificial Intelligence in Higher Education	94
	Fahriye ALTINAY, Ceren KARAATMACA, Zehra ALTINAY, Gökmen DAGLI	
86	Distance Learning as the Professional Development Tool of Employees under the Company Staff Policy	94
	Polina ANANCHENKOVA, Victoriya TONKONOG, Andrey GORYAINOV	
86	Redesigning Educational Tools Using Auto-Generative Learning Objects	95
	Felicia-Mirabela COSTEA, Ciprian-Bogdan CHIRILA, Vladimir-Ioan CREȚU	
87	The Impact of Technological Progress on Young People	96
	Simona Nicoleta NEAGU, Aniella Mihaela VIERIU	
88	Innovative Strands in the ZOE Project	96
	Anca Cristina COLIBABA, Irina GHEORGHIU, Stefan COLIBABA, Carmen ANTONITA, Irina CROITORU, Ovidiu URSA	
88	E-Learning Incentives for Improving the Engineering Students’ Accuracy in English for Work Purposes and Online Professional Communication	97
	Elisabeta Simona CATANĂ	
89	Redesigning Science Classes Through the e-Classes Project’s Initiatives	98
	Anca Cristina COLIBABA, Irina GHEORGHIU, Lucia Cintia COLIBABA, Ramona CIRSMARI, Rodica GARDIKIOTIS, Anais COLIBABA	
89	Sustained Silent Reading and Specialised Vocabulary for ESP. A Case Study	99
	Alexandra COTOC	

The Role of the Teacher of Foreign Languages in Online Environment and in Classical Classrooms	99
Irina-Ana DROBOT	
Using e-Portfolios in Teaching English for Academic Purposes – Developing Independent Learning Skills	100
Cristina FELEA, Liana STANCA	
Adapting STEM Automated Assessment System to Enhance Language Skills	101
Marina MARCHISIO, Alice BARANA, Francesco FLORIS, Marta PULVIRENTI, Matteo SACCHET, Sergio RABELLINO, Carla MARELLO	
Language and Safety: The Benefits of Using Audio Visual Aids in Teaching Aviation English	101
Corina MĂRCULESCU	
Teaching Professional Interviews with Online Resources – a Key Path to Success.....	102
Mihaela PRICOPE, Simona MAZILU, Fabiola POPA	
An E-Learning Model in a Systems Theory Approach.....	103
Brandusa RAILEANU	
Multilingualism and Minority Language Teaching. Between Tradition and Revitalization.....	104
Ioan-Laurian SOĂRE, Maria-Cristina MUNTEANU-BĂNĂŢEANU	
Problematics of the Emigrants' Accommodation in a New Educational Context The Perspective of Pupils'	104
Aniella-Mihaela VIERIU, Simona-Nicoleta NEAGU	
The Importance of Multimedia in Teaching/Learning the Specialized Languages	105
Victoria VÎNTU, Argentina CHIRIAC, Tatiana TREBEŞ, Aliona BUSUIOC	
Corpus-based Research and Romanian Teachers of EFL. Examining Key Aspects of English Usage	105
Ruxandra VIŞAN	
Information and Documentation through New Technologies in E-Learning Process.....	106
Doina BANCIU, Ionuţ PETRE, Radu BONCEA	
Machine Learning Based Methods Used for Improving Scholar Performance	107
Radu BONCEA, Ionuţ PETRE, Victor VEVERA, Alexandru GHEORGHÎĂ	
Accessibility of the Digital Scientific Literature – A Study on Researchers' Perspective	107
Elena POPESCU	
E-Learning Process through Cloud Facilities.....	108
Ionuţ-Eugen SANDU, Mihail DUMITRACHE	

99	Ontologies - Facilitators for Curriculum Design in Centers of Excellence for Engineering Education	109
	Maria-Iuliana DASCĂLU, Elisabeth LAZAROU, Melania NIȚU, Iulia-Cristina STĂNICĂ, Constanța-Nicoleta BODEA, Alexandra-Maria DOBRESCU	
00	ARVEE - An Innovative Application based on Virtual Reality for Immersive Education	109
01	Maria-Iuliana DASCĂLU, Tudor Mihai URSACHI, Robert BREZOAIE, Iulia-Cristina STĂNICĂ, George DRĂGOI	
	Virtual Educational Environment as One of the Perspective Technologies of e-Learning in Foreign Language Teaching	110
101	Angelina DUBSKIKH, Yulia SAVINOVA, Anna BUTOVA	
	Learning of Supporting-Motor System	111
102	Elena KIRINA, Iurii STROGANOV	
	User Verification Based on the Analysis of His Images in the Distance Learning System	111
103	Daniil LOKTEV, Alexey LOKTEV	
	SIEM-Platform for Research and Educational Tasks on Processing of Security Information Events	112
104	Alexey MITKOVSKIY, Andrey PONOMAREV, Andrey PROLETARSKIY	
	Team Work and Strategic Skills Development through the Use of the General Management 2 Business Simulation	113
104	Ioan Cristian MUSTAȚĂ, Ioana Raluca GUICĂ, Vlad CARAS	
	The Potential of Developing Strategic Thinking Skills through Strategic Games with Physical vs. Electronic Participation	113
105	Ioan Cristian MUSTAȚĂ, Ioana Raluca GUICĂ, Miquel JULIACIFRE	
	Developing the ESP Ability of Vietnamese Students through the use of Blended Learning	114
105	Phuong Anh NGO	
	Clustered and Nonclustered Indexes in Databases and Educational Tasks on Development the Structure of Databases	114
106	Andrey PONOMAREV, Yury SHASHKIN, Alexey MITKOVSKIY, Andrey PROLETARSKIY, Oleg KOROTKEVICH	
107		
	Improving the Quality of Engineering Education through Modern Educational Technologies	115
107	Tatiana SALIMOVA, Elena SOLDATOVA, Irina FILIPPOVA	
	E-Learning Resources as a Means of Developing Engineering Students' Soft Skills	116
108	Yuliya SAVINOVA, Natalia SIVTSEVA, Svetlana LATYSHEVA	

Electronic Terminological Mini-Dictionary in the Context of Cognitive and Methodological Challenges	116
Yuliya SAVINOVA, Svetlana POZDNYAKOVA, Natalia MOKROVA	
Introduction and Use of Modern Educational Technologies in Education in the Republic of Tajikistan	117
Daler SHARIFI, Alla ASLITDINOVA	
New Approaches to the Organization of Educational Processes for Engineering Directions in Tajikistan	118
Elena SMIRNOVA, Abduvahob VAHHOBOV, Vosidjon SIDIKOV	
The Kolmogorov Complexity as a Tool of Students' Preparation to be a Researcher	119
Elena SMIRNOVA, Maria STEPANOVA, Ksenya ZVEREVA	
Intelligent Feedback Systems in Higher Education – Why and How?	119
Karlis VALTINS, Natalja MURACOVA	
Use of Network Services Web 2.0 for ICT Competence Formation of Students in Engineering with Application of Project Approach	120
Natalya ZERKINA, Galina CHUSAVITINA, Ekaterina KARMANOVA	
Extend Centre's Resources for Increasing General Digital Literacy	121
Natalya ZERKINA, Yekaterina LOMAKINA, Olesya KISEL, Elisabeth LAZAROU	
The Influence of National Culture on Technology Adoption	121
Florin OGÎGĂU-NEAMȚIU, Cristina ANTONOAIIE	
The Design and Implementation of Student Attendance Tracking System Using QR Code Card	122
Siti Nazleen ABDUL RABU	
Implement Online Laboratories in Electrical and Computer Engineering Education using Virtual Learning Environments	122
Adrian ADĂSCĂLIȚEI, Sebastian ARĂDOAIEI, Marinel TEMNEANU, Ashraf Salah EL-DIN ZEIN EL-DIN	
Innovation of Teaching and Learning Practices through Online Collaborative Projects	123
Alexandra ARAMA	
A Study on the Satisfaction at the Workplace	124
Ramona-Cristina BĂLĂNESCU	
Education and Modern Technologies, their Positive and Negative Impact	124
Teodora Daniela CHICIOREANU, Maria Gratiela IANOS, Renata DANIELIENÉ	
Education Software and Modern Learning Environment: Elearning	125
Raluca-Giorgiana CHIVU, Gheorghe ORZAN, Ionuț-Claudiu POPA	

116	Educational Trends in Medicine: Collaborative Technologies and Pedagogical Models	126
	Dana CRĂCIUN	
117	Project Manager Profile	126
	Elena Oliviana EPURESCU	
118	Approaches to Companies' Personnel Education and Training in the Field of Digital Marketing	127
	Gheorghe MINCULETE, Sorin MINCULETE	
119	Social Networks: Learning Tools or Just Socializing Environment?	127
	Gabriela Carmen OPROIU, Maria Gratiela IANOS, Nicoleta LITOIU	
119	Millennials and the Need for Adapting e-Learning Methods for Business Performance – a Case Study	128
	Cătălin Ionuț SILVESTRU, Gabriela MEHEDINȚU, Ramona Camelia SILVESTRU (BERE), Vasilica-Cristina ICOCIU	
120	Novel Artificial Intelligence Technologies for Enhanced Recruitment Campaigns Using Social Media	129
	George SUCIU, Adrian PASAT, Cristian VASILESCU	
121	A New Method to Help the Human Resources Staff to Find the Right Candidates, Based on Deep Learning	129
	Cristian VASILESCU, George SUCIU, Adrian PASAT	
121	Attitude Prediction towards ICT and Mobile Technology for the Real-Time: An Experimental Study using Machine Learning	130
	Chaman VERMA, Zoltan ILLES	
122	A Tutorial for Computational Fluid Dynamics Applied to Multilayer Flow Modulator	130
	Călin CORCIOVĂ, Marius TURNEA, Dragoș AROTĂRIȚEI, Andrei GHEORGHITĂ	
122	Modern Teaching Methods Used in the Study of Sensors and Transducers in the Biomedical Field	131
	Doru ANDRIȚOI, Cătălina LUCA, Robert FUIOR	
123	Educational Tool for Mathematical Model of Muscular Dystrophy	132
	Dragos AROTARITEI, Catalin IONITE, Calin CORCIOVA	
124	Eye Movement Analysis System in Relation to Biomechanical Perturbations	132
	Mihaela Ioana BARITZ	
124	Comparison of Sample Sizes to Estimate Proportions	133
	Lucian Vasile BOICULESE, Gabriel DIMITRIU, Cristina Gena DASCĂLU, Mihaela MOSCALU	

Global Sensitivity Analysis Applied to a Cancer Immunotherapy Model	133
Gabriel DIMITRIU, Lucian Vasile BOICULESE, Mihaela MOSCALU, Cristina Gena DASCĂLU	
Assisted Movement Training System for Conventional Therapy Techniques Rehabilitation	134
Robert FUIOR, Doru ANDRIȚOI, Cătălina LUCA, Daniela MATEI	
Dynamics of Salmonella Transmission Using Compartmental Models	134
Mihai ILEA, Andrei GHEORGHITA, Marius TURNEA	
Comparative Study of Kinetic Protocols for Evaluating the Influence of Pubis Osteitis on Football Players	135
Catalin IONITE, Mariana ROTARIU, Mihai ILEA, Gloria RATA	
The Use of Thermography as an Educational Tool in the Study of Chemical Reactions with Heat Transfer	136
Cătălina LUCA, Mădălina POȘTARU, Mădălina DATCU, Doru ANDRIȚOI	
Simulation of Mio-Arthro-Kinetic System Parameters in the Planting Region in Order to Optimize Postural Position	136
Mariana ROTARIU, Dragos AROTARITEI, Catalin IONITE	
Development of a Micro-Current Arduino-Based Low Cost User-Friendly Cranial Electrotherapy Stimulation for the Treatment of Pain, Depression, Insomnia and Anxiety	137
Michael Moyosola SHEBA, Ionel-Bujorel PĂVĂLOIU, Costin Anton BOIĂNGIU	
The Mathematical Modelling of the Microbial Growth Process	137
Marius TURNEA, Calin CORCIOVA, Mihai ILEA, Mariana ROTARIU	
Informatics System for Workpiece Clamping Scheme Generation in Machining Fixtures	138
Neculai Eugen SEGHEDEIN, Dragoș Florin CHITARIU	
Drawing Technical Sketches of Model Garments by Using Specialised Software	138
Manuela AVADANEI, Irina IONESCU, Emil-Constantin LOGHIN, Ionut DULGHERIU, Savin-Dorin IONESI, Mariana URSACHE	
Teaching and e-Learning about Cotton Ring Spinning Frame	139
Ionel BARBU, Andrei KOMJATY, Magdalena Simona FOGORASI, Adina BUCEVSCHI, Monica PUSTIANU	
Interactive Shape Sizer Library for Fully Fashion Knitwear Training	140
Mirela BLAGA, Dorin DAN, Mihai PENCIUC	
The Applications of Microlearning in Higher Education in Textiles	140
Adrian BUHU, Liliana BUHU	

133	Simulation of Water Vapours Diffusion through Textile Structures	141
	Teodor-Cezar CODĂU, Elena CODĂU, Ioan CIOARĂ	
	A New Systemic Approach to Determine the Weight of Professional Competence Types in Employability Explanation	142
134	Mihaela COJAN, Adrian VÎLCU, Ion VERZEA	
	Computing the Sewing Time and the Determining how to Drive Industrial Sewing Machines.....	142
134	Ionut DULGHERIU, Irina IONESCU, Emil LOGHIN	
	The Analysis of the Interaction of Working Bodies through Studying the Cyclorama of the Sewing Machine	143
135	Ionut DULGHERIU, Irina IONESCU, Manuela AVADANEI, Savin-Dorin IONESI	
	Software Application for the Functional Thermo – Design of the Clothing.....	144
136	Daniela FĂRÎMĂ, Mirela BLAGA, Georgios PRINIOTAKIS	
	Interactive Application for Knitted Structures Based on 3D Printed Macromodels.....	144
136	Savin Dorin IONESI, Luminita CIOBANU, Manuela AVADANEI, Mariana URSACHE, Emil Constantin LOGHIN	
	Logical and Sequential e-Learning Content for Supporting Specialists in Textile Enterprises	145
137	Ion-Răzvan RĂDULESCU, Carmen GHÎȚULEASA, Emilia VISILEANU, Ana DIAS, Zoran STJEPANOVIC, Roberto VANNUCCI, Mirela BLAGA	
	Student Perception Regarding the Use of Devices as Learning Tools.....	146
137	Bogdan RUSU, Mihaela Brîndușa TUDOSE	
	Student's Perceptions Regarding Learning Spaces within the E-Learning Context.....	146
138	Bogdan RUSU, Mihaela Brîndușa TUDOSE	
	Hierarchic Principal Component Analysis Method for the Organization of Components Weights in Employment Process, from Employer Prospective.....	147
138	Adrian VÎLCU, Mihaela COJAN, Ion VERZEA	
	A Serious Game Approach in Anti-Doping Education: the Game Project.....	148
139	Vasileios BARKOUKIS, Thrasyvoulos TSIATSOS, Nikolaos POLITOPOULOS, Panagiotis STYLIANIDIS, Efthymios ZIAGKAS, Lambros LAZURAS, Antonia YPSILANTI	
140		
	Polar Team Pro – the Ultimate Diagnosis Tool in Competitive Football.....	148
140	Aura BOTA, Silvia TEODORESCU, Mariana MEZEI, Ilie ALEXE	
	How the GPS Monitoring System Helps Us in Conducting Training and Improving Performance in Rugby	149
140	Adina Andreea DREVE, Gheorghe MARINESCU, Marius STOICA, Laurențiu TICALĂ	

Monitoring Changes in the Foot Posture by Using PRESSCAM Software.....	149
Carmen Liliana GHERGHEL, Mariana CORDUN, Gelu COSMA	
Study on the Efficiency of the Myotest Device in the Development of the Minisoccer Players Explosive Strength	150
Carmen GRIGOROIU, Raluca-Anca PELIN, Adrian-Daniel PRICOP, Mihaela NETOLITZCHI	
Computerized Differences in the Simple Reaction Time Between Athlete and Non-Athlete Female Students in U.P.B. – comparative analysis	151
Nicoleta LEONTE, Alina Daniela MOANȚĂ, Ofelia POPESCU	
The Effect of Reference to the Ball on the Height of Volleyball Block Jump and Volleyball Attack Jump of Volleyball Players.....	151
Navot MILO, Emilia Florina GROSU, Michaela MILO, Vlad Teodor GROSU	
Physical Exercises and Computer-Based Games: from Playground to Serious Games and Exergames.....	152
Monica STĂNESCU, Doina CROITORU, Jurate STANISLOVAITIENE	
Ways of Exploitation the Polar Team Pro Data in Conducting the Training Process in A Competitive Football Team.....	153
Silvia TEODORESCU, Aura BOTA, Mariana MEZEI, Costin CURELEA	

Adapting STEM Automated Assessment System to Enhance Language Skills

10.12753/2066-026X-19-126

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Abstract: *Enhancing language skills is a duty for many institutions, schools and universities; Information and Communications Technology is nowadays supporting language teaching, heading also to the integration of foreigners. According to previous studies, the use of a Technology Enhanced Learning Environment can foster language competences through online tests. The goal of this paper is to show and discuss different typologies of automatically evaluated questions useful to learn languages and designed with an Automatic Assessment System, already successfully used for teaching STEM disciplines: Science, Technology, Engineering and Mathematics. This work has been carried out thanks to the collaboration between the Department of Mathematics and the Department of Foreign Languages. Five different typologies of questions are analysed: "Combining sentence elements" asks to combine given elements to form at least three correct and meaningful sentences; "Find the mistake" asks whether a sentence is grammatically correct and to explain why; "The Target puzzle" asks to join words together using precise links; "Scrambled text" asks the student the correct sequence of sentences in a scrambled text; "The Encrypted Crossword puzzle" is a crossword puzzle without definition clues. Linguists consider these question types effective to develop language competences and have already used them profitably in traditional teaching and language learning. To engage the learner and increase motivation, we will develop an implementation where the questions are self-evaluated, always available, with immediate and interactive feedback. These tools could be used in online language courses and in all those teaching activities that are carried out remotely by the student alone. All questions are outlined with the explanation of the grading code and a triplet of descriptors; they describe the Performance, Requirements and Objectives of each question and allow further studies on automatic detection of the relatedness between different language learning objects, in order to construct adaptive language tests.*

Keywords: *Automated Assessment System; Language skills; Language learning; Ontology; Technology Enhanced Learning.*

Language and Safety: The Benefits of Using Audio Visual Aids in Teaching Aviation English

10.12753/2066-026X-19-127

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Abstract: *Aviation English is unique in English for Specific Purposes (ESP) because in the aeronautical field, language is inseparable from safety. The passengers' lives and safety depend on the accurate communication between pilots and air traffic control officers (ATCOs), on the precision of their language. My paper puts forward the suitability and effectiveness of using audio-visual aids (video*

The publications consists of 154 pages.

"Carol I" National Defence University Typography
Bucharest/Romania, sector 5, 68-72 Panduri Street
e-mail: editura@unap.ro
Phone: 00-40-021-319.48.80/0215; 0453

Supporting Organizations:



The 15th eLearning and Software for Education Conference - eLSE 2019 - organized by the Romanian Advanced Distributed Learning Association is hosted in Bucharest, April 11th - 12th, 2019.

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The conference proceedings volumes will be submitted for indexing to the following international databases:



ISSN 2360-2198
ISSN-L 2360-2198



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