Title	Author1	Author email	Author University	Author country
On Map-Centric Programming Enviror	ments Aref, W. et al.	aref@cs.purdue.edu	Purdue University	Indiana
A Game Engine in Pure Python for C	S1: De Aycock, J. <i>et al.</i>	aycock@ucalgary.ca	University of Calgary	Canada
Measuring the level of algorithmic skil	s at th Biró, P. <i>et al.</i>	<u>biro.piroska@inf.unideb.hu</u>	University of Debrecen	Hungary
TEACHSCHEME, REACHJAVA: INTR	ODUC Bloch, S.	sbloch@adelphi.edu	Adelphi University	United State
Performance analysis of GAME: A ge	neric a Blumenstein, M. <i>et al.</i>	M.Blumenstein@griffith.edu	Griffith University	Australia
Growing Algorithmic Thinking Through	n Inter Combéfis, S. <i>et al.</i> Combéfis, S. <i>et al.</i>	sebastien.combefis@uclou	Université catholique de Lo	Belgium
Providing a flexible, learner-centred p	rogran Cornelius, S. & Gordon, C	s.comelius@abdn.ac.uk	University of Aberdeen	United Kingdom
Relation between Alice software and	progra Costa, J. & Miranda, G.	joana.martinho.costa@cam	University of Lisbon	Portugal
Problem-Solving in History: Strategy 0	Sames DeVane, B. & Durga, S.	devane@wisc.edu	University of Wisconsin-Mad	United State
Wu's Castle: Teaching Arrays and Lo	ops in Eagle, M. & Barnes, T.	maikuusa@gmail.com	University of North Carolina	United State
Designing an Effective e-Content Dev	velopm Hamdi, M. & Hamtini, T.	maisoonhamdi@gmail.com	The University of Jordan	Jordan
	Hamdi, M. & Hamtini, T.			
A pilot study of cooperative programm	_	wang@pu.edu.tw	National Central University	Taiwan
	Hwang, W. <i>et al.</i>			
Teaching java programming on smart	phone John, S. & Shanthi, M.	drmaryshanthi@ruraluniv.ac	Deemed University	India
The influence of game-based program	nming Kiss, G. & Arki, Z.			
	Kiss, G. & Arki, Z.	<u>kissga@ujs.sk</u>	J. Selye University	Slovakia
Diverse categories of programming le	arning Kordaki, M.	m.kordaki@aegean.gr	University of the Aegean	Greece
A Programming Environment for Visu	al Bloc Kurihara, <i>A. et al.</i>	hosobe@acm.org	Hosei University	Japan
Developing a Novel Pair Programming	Sche Lee, J. <i>et al.</i>	nm5993@naver.com	Jeju National University	Korea
	Lee, J. et al.			
How Can a Social Debugging Game	Effectiv Lee, M.	mjslee@uw.edu	University of Washington	United State
	Lee, M.			
Personifying Programming Tool Feed	back Ir Lee, M. & Ko, A.	mjslee@uw.edu	University of Washington	United State
	Lee, M. & Ko, A.		·	
Comparative study of self-test question		reginamary.matthews@nott	The University of Nottingha	Malaysia
Game Based Early Programming Edu	cation Paliokas, I. et al.	ipalioka@teithe.gr	Alexander Technological Ed	Greece
Digital Game-Based Learning in high		mpapas@uth.gr	University of Thessaly	Greece
5 5	. 3			

An Integrated Approach to Teaching Introd Pullan, W. et al.	w.pullan@griffith.edu.au	Griffith University	Australia
Increasing practical lessons and inclusion of Ramirez, A. & Muñoz, D.	adan.ramirez@itam.mx	Instituto Tecnológico Autór	n Mexico
Investigating the role of computer-supported Su, A. et al.	jhyang@csie.ncu.edu.tw	National Central University	Taiwan
LIMO: Learning Programming using Interact Tahboub, R. et al	rtahboub@cs.purdue.edu	Purdue University	Indiana
The Effect of an Example-Based Dynamic P Tekdal, M.	mtekdal@cu.edu.tr	Çukurova University	Turkey
An Exercise Management System for Teach Tung, S. et al	tungsh@yuntech.edu.tw	National Yunlin University of	Taiwan
Tung, S. et al			
Educational Software Engineering: Where SXie, T. et al	xie@csc.ncsu.edu	North Carolina State Univer	r United State
Xie, T. et al			
Microworlds, Games and Collaboration: thre Xinogalos, S. et al	stelios@uom.edu.gr	University of Macedonia	Greece
Xinogalos, S. et al			
∐The K-12 learn-to-code movement is leavir ∐Wyeld, Т.	theodor.wyeld@flinders.ed	L Flinders University	Australia
USonification Blocks: A Block-Based Progra ЦАtherton, J.	lja@ccrma.stanford.edu	Stanford University	United State
Milo: A visual programming environment for Rao, A.	mailarjunrao@gmail.com	Ramaiah Institute of Techn	India

Organization	Туре	Publication	Year	DOI	Country
ACM SIGSPATIAL	Conference Proceedings	Proceedings of The 23rd A	2015	http://dx.doi.org/10.1145/28	USA
ACM	Conference Proceedings	Proceedings of the 2015 A	2015	http://dx.doi.org/10.1145/27	Canada
ELSEVIER	Journal Article	Procedia Social and Behav	2015	http://dx.doi.org/10.1016/j.s	Humgary
Consortium for Compu	Abstract /Poster session	Journal of Computing Scien	2010	https://dl.acm.org/citation.cf	USA
ELSEVIER	Journal Article	Computers & Education	2008	http://dx.doi.org/10.1016/j.d	Australia
Vilnius University	Conference Proceedings	Olympiads in Informatics	2013		Belgium
ELSEVIER	Journal Article	<u> </u>		http://dx.doi.org/10.1016/j.i	
	Journal Article			http://dx.doi.org/10.1111/bj	•
	Conference Proceedings	_		http://citeseerx.ist.psu.edu/	
	Conference Proceedings	_		chttps://dl.acm.org/citation.cf	
	Journal Article	International Journal of Em	2016	http://dx.doi.org/10.3991/ije	Jordan
ELSEVIER	Journal Article	Computers & Education	2012	http://dx.doi.org/10.1016/j.d	Taiwan
ELSEVIER	Journal Article	Procedia - Social and Reha	2015	http://dx.doi.org/10.1016/j.s	India
ELSEVIER	Conference Proceedings			http://dx.doi.org/10.1016/j.s	
LLGEVILIX	Conference Proceedings	Fiocedia - Social allu bella	2017	1111p.//dx.doi.org/10.1010/j.s	Siovakia
ELSEVIER	Conference Proceedings	Procedia - Social and Beha	2012	http://dx.doi.org/10.1016/j.s	Greece
ELSEVIER	Conference Proceedings	Procedia Computer Science	2015	http://dx.doi.org/10.1016/j.r	Japan
•	Journal Article	International Journal of Sof	2016	http://dx.doi.org/10.14257/i	Republic of Korea
ACM Special Interest	Conference Proceedings	Proceedings of the 2013 A	2013	http://dx.doi.org/10.1145/24	USA
ACM	Conference Proceedings	Proceedings of the seventh	2011	http://citeseerx.ist.psu.edu/	USA
ELSEVIER	Journal Article	Procedia - Social and Beha	2015	http://dx.doi.org/10.1016/j.s	Malaysia
	Journal Article	Lecture Notes in Computer	2013	http://dx.doi.org/10.1007/97	Greece
ELSEVIER	Journal Article	Computers & Education		http://dx.doi.org/10.1016/j.d	
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	Journal Article	e-Learning and e-Technolo	2013	http://dx.doi.org/10.1109/IC Australia
ELSEVIER	Conference Proceedings	Procedia - Social and Beha	2015	http://dx.doi.org/10.1016/j.s México
	Journal Article	British Journal of Education	2014	http://dx.doi.org/10.1111/bj Taiwan
ACM	Conference Proceedings	23rd ACM SIGSPATIAL Into	2015	http://dx.doi.org/10.1145/28 USA
	Journal Article	Educational Technology &	2013	http://www.jstor.org/stable/je Turkey
	Journal Article	Journal of Software	2013	http://dx.doi.org/10.4304/js/ Taiwan
	Conference Proceedings	Conference: Games and So	2013	http://dx.doi.org/10.1109/G USA
ACM	Conference Proceedings	Proceedings of the 7th Ball	2015	http://dx.doi.org/10.1145/2{ Greece
Springer Nature Sing	a lournal Article	Communications in Comput	2018	□10.1007/978-981-13-0008-0 __ 16
		•		□10.1145/3078072.3091992
2018 IEEE Symposiu	ır Conference of Proceeding	S	2018	□10.1109/VLHCC.2018.8506504

Institution Purdue University University of Calgary University of Debrecen Adelphi University Griffith University	Method Case study Case study Case study Workshop Experiment Experiment	Educational program LIMO Python Spreadsheet Scheme; Java GAME; Java, C; C++ ILPADS	Results This paper studies resea present a game engine v The system which relies hea summarizes the major pe The results obtained from th The paper presents the inte
University of Aberdeen University of Lisbon University of Wisconsin University of North Carolina The Jubilee Center for Exce	•	Learning Objects ALICE, Java, C; C++ Civilization III Wu's Castle Quick Basic	The ability of the programm until now there have b concludes that the proble The results show learning g The results showed that the
National Central University	Experiment	WPASC	The results of this study rev
Deemed University J. Selye University	Pilot study Case study	Java C	This research paper applied The traditional way to teach
University of the Aegean	Experiment	Scracth	This paper presented a set
Hosei University Jeju National University	Proposal Proposal	Visual DSL; Processing Entry	proposed a programminç developed a novel pair p
University of Washington	Experiment	Gidget	
University of Washington	Experiment	Gidget	when given the option to
Multimeida University / The Alexander Technological E University of Thessaly/High	Case study	C Logo LearnMem1	The survey results of this st A new solution for applying the gaming approach wa

ш	th University	Case study	Java Programming Laborate	students are motivated b
it	uto Tecnológico Autón	Experiment	N/A	The results obtained from the
io	onal Central University	Quasi-experiment	Scratch	Students who received ASF
		Proposal	LIMO	Example programs that i⊩
u	ırova University	Quasi-experimenta	EDPVE	The results of the experime
io	onal Yunlin University o	Experiment	PLWeb	students like PLWeb sinc
th	n Carolina State Univer	Proposal	Pex4Fun	define educational so
/ €	ersity of Macedonia	Pilot study	ObjectKarel	the different features of
			00 0 11 0 5 11	5.6
				·
		Activity	Sonification Blocks	Sonification Blocks provides
		user study	Milo	Milo succeeds as an effecti
io th	urova University onal Yunlin University o n Carolina State Univer	Proposal Quasi-experimenta Experiment Proposal Pilot study Case study Activity	LIMO EDPVE PLWeb Pex4Fun ObjectKarel 2D Online Games Editor Sonification Blocks	Example programs that in The results of the experime students like PLWeb sinc define educational sof the different features of Before and after questionnes Sonification Blocks provides

Objective	University Educatic Site web	Type language
Improve to learning of programming		Programming language
Improve to learning of programming	Python Software F https://www.pyth	or Programming language
Assessment the learning effectiveness		Functional language
Evaluate or compare an educational program	Scheme	Functional language
Evaluate or compare an educational program	Generic automated marking enviror	rr Generic automated marking
Improve computacional thinking	Sitio web ILPADS http://www.csited	<u>.t</u> Interactive learning of progr
Learning of programming through an interactive website		
Implementation of a programme of study for programming	course	Programming language
Evaluate or compare an educational program	Carnegie Mellon U https://www.alice	<u>.c</u> Block Language
Computational thinking across the curriculum		Videogame
Increase student motivation for learning to program	Game Maker http://www.game	2 Educational game
Apply the cognitive theory for multimedia learning	Microsoft Corporation	Programming language
Improve to learning of programming		
Investigate cooperative programming learning behavior		Web-based programming
Increase student motivation for learning to program		
Improve to learning of programming		
Improve to learning of programming		Programming language
Improve computacional thinking		
Improve to learning of programming	Massachusetts Ins www.scratch.mit.	<u>ec</u> Block Language
Apply a programming environment visual block-based dom	ne Microsoft Corporat https://msdn.mic	o Notation graphical
Evaluate or compare an educational program	https://playentry.	oı Block Language
Improve computacional thinking		
Evaluate or compare an educational program	http://www.helpg	id Game for learning
Improve to learning of programming		
Increase student motivation for learning to program	http://www.helpg	id Game for learning
Improve to learning of programming		_
Assessment the learning effectiveness		Programming language
Evaluate or compare an educational program	UCBLogo http://el.media.m	it. Programming language
Assessment the learning effectiveness	<u> </u>	Game

Improve to learning of programming

Computational thinking across the curriculum

Evaluate or compare an educational program

Improve to learning of programming
Use of dynamic program visualization techniques
Improve to learning of programming
Assessment the learning effectiveness
Improve to learning of programming
Apply software engineering technologies
Improve to learning of programming
Apply software engineering technologies

Improve to learning of programming

Increase student motivation for learning to program

Improve to learning of programming

Integrated learning environr

Massachusetts Ins www.scratch.mit.ec Block Language
Purdue University http://www.purdue Programming language

Example-Based Dynamic Program Vis Computer-assisted learning

Programming Learning Web Site web

Microsoft Research https://pexforfun.c Game for learning

Educational software

https://ccrma.stanford.edu/~lja/sonification/