View at Publisher | Export | Download | Add to List | More...

Proceedings - 2014 3rd International Conference on User Science and Engineering: Experience. Engineer. Engage, i-USEr 2014

6 January 2015, Article number 7002718, Pages 287-291

2014 3rd International Conference on User Science and Engineering, i-USEr 2014; Faculty of Computer and Mathematical Sciences, UiTM Shah AlamShah Alam, Selangor; Malaysia; 2 September 2014 through 5 September 2014; Category numberCFP1487L-CDR; Code 109985

Enhancement of the ARCS model for gamification of learning

(Conference Paper)

Hamzah, W.M.A.F.W.[a]   , Ali, N.H.[a]   , Mohd Saman, M.Y.[a]   , Yusoff, M.H.[a]   , Yacob, A.[b]

[a] School of Informatics and Applied Mathematics, Universiti Malaysia Terengganu, K. Terengganu, Malaysia
[b] Faculty Computer, Media and Technology, TATi University, Terengganu, Malaysia

Abstract

View references (26)

ARCS model is a motivational design **model** for **learning** environments to stimulate and sustain learner motivation using the problem-solving approach. The **ARCS model** often used to identify and solve problems in a systematic way to motivate a learner in classroom **learning** or e-**learning** environment. The **gamification** of **learning** provides a useful technique to drive engagement and motivation in applying game mechanics and dynamics into **learning** activities. In spite of the success of **gamification** of **learning**, there are also failures. The proper method is needed to integrate **gamification** into **learning**. In this paper, we propose an enhanced **ARCS model** for **gamification** of **learning** called **ARCS**+G. The **ARCS**+G **model** is aimed to provide a solution for the problems in utilizing **gamification** of **learning**. © 2014 IEEE.

Author keywords

ARCS model; design process; gamijication; motivational design

Indexed keywords

Engineering controlled terms: Computer aided instruction; Design; E-**learning**; Motivation; Problem solving

ARCS model; Classroom **learning**; Design modeling; Design process; E-**learning** environment; gamijication; **Learning** Activity; **Learning** environments

Engineering main heading: Learning systems

References (26)

View in search results format

○ Page   Export | Print | E-mail | Create bibliography

○
1   Campbell, J.P., Dunnette, M.D., Lawler, E.E., Weick, K.E.
(1970) *Managerial Behaviour, Performance, and Effectiveness*. Cited 502 times.
New York: McGraw-Hill. Carver, C.S

○
2   Amabile, T.M., Hill, K.G., Hennessey, B.A., Tighe, E.M.
The Work Preference Inventory: Assessing Intrinsic and Extrinsic Motivational Orientations
(1994) *Journal of Personality and Social Psychology*, 66 (5), pp. 950-967. Cited 497 times.
View at Publisher

○
3   Keller, J.M.
(2006) *What is Motivational Design?*. Cited 12 times.
Florida State University, 1-12

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert | Set citation feed

Related documents

Metrics

○   Vroom, V.H.
4   (1964) *Work and Motivation*. Cited 3692 times.
    San Francisco, CA: Jossey-Bass

○   Keller, J.M.
5
    (1984) *Aspects of Educational Technology Volume XVII: Staff Development and Career Updating*. Cited 32 times.
    K. Shaw and A. J. Trott (Eds.) London: Kogan Page

○   Deterding, S., Sicart, M., Nacke, L., O'Hara, K., Dixon, D.
6
    (2011) *Proceedings of CHI Extended Abstracts*, pp. 2425-2428. Cited 52 times.
    ACM

○   Monterrat, B., Lavoué É., George, S., Lyon, D., Lyon, I.A.E., Jean, U., Lyon, M.
7
    (2011) *State of the Art: User Models in Game Based Learning Architecture for A Personalised Gamification, (Table 1)*, pp. 1-4.

○   Lee, J.J., Hammer, J.
8
    (2011) *Academic Exchange Quarterly*, 15 (2), pp. 146-151. Cited 94 times.

○   Marache-Francisco, C., Brangier, E.
9
    (2013) *Proceedings of DUXU/HCII 2013, Part II, LNCS 8013*, pp. 558-567.

○   Kim, J.T., Lee, W.-H.
10   **Dynamical model for gamification of learning (DMGL)**
    (2015) *Multimedia Tools and Applications*, 74 (19), pp. 8483-8493. Cited 2 times.
    doi: 10.1007/s11042-013-1612-8

    View at Publisher

○   Keller, J.M.
11   (2010) *Motivational Design for Learning and Performance: The ARCS Model Approach*. Cited 92 times.
    New York: Springer

○   Gagné, R.M.
12   (1965) *The Conditions of Learning*. Cited 1331 times.
    New York: Holt, Rinehart and Winston, Inc

○   Gagné, R.M., Briggs, L.J., Wager, W.W.
13   (1992) *Principles of Instructional Design (4th Ed.)*. Cited 1346 times.
    New York: Harcourt Brace Jovanovich College Publishers

○   Skinner, B.F.
14
    (1954) *Harvard Educational Review*, 24, pp. 86-97. Cited 267 times.

○   Malone, T., Lepper
15
    (1987) *Aptitude, Learning, and Instruction: Conative and Affective Process Analyses*, 3. Cited 716 times.
    R. Snow and M. J. Farr, (Ed) Hillsdale, NJ

○   Feng, S.-L., Tuan, H.-L.

16　**Using ARCS model to promote 11th graders' motivation and achievement in learning about acids and bases**

(2005) *International Journal of Science and Mathematics Education*, 3 (3), pp. 463-484. Cited 14 times.
doi: 10.1007/s10763-004-6828-7

　View at Publisher

○　Lee, J., Kim, Y.

17

(2012) *Busan Korea. Imacst*, 3 (1), pp. 33-43.

○　ChanLin, L.-J.

18　**Applying motivational analysis in a Web-based course**

(2009) *Innovations in Education and Teaching International*, 46 (1), pp. 91-103. Cited 24 times.
doi: 10.1080/14703290802646123

　View at Publisher

○　Keller, J.M.

19

(2008) *Cognition and Learning*, 6, pp. 79-104. Cited 29 times.

○　Keller, J.M.

20　**First principles of motivation to learn and e3-learning**

(2008) *Distance Education*, 29 (2), pp. 175-185. Cited 67 times.
doi: 10.1080/01587910802154970

　View at Publisher

○　Nakajima, K., Nakano, H., Ohmori, F., Suzuki, K.

21

(2010) *International Journal for Educational Media and Technology*, 5 (1), pp. 150-161.

○　Deterding, S., Dixon, D., Khaled, R., Nacke L, L.

22

(2011) *Proceedings of MindTrek*. Cited 4 times.

○　Zichermann, G., Cunningham, C.

23　(2011) *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*, pp. 35-36. Cited 202 times.
O'Reilly

○　Hunicke, R., Leblanc, M., Zubek, R.

24

(2004) *Proceedings of the Challenges in Game AI Workshop, Nineteenth National Conference on Artificial Intelligence*. Cited 44 times.

○　(2010) *Gamification 101: An Introduction to the Use of Game Dynamics to Influence Behavior*. Cited 31 times.

25

Bunchball Inc Whitepaper. Bunchball Inc

○　Keller, J.M.

26

(1999) *International Journal of Educational Technology*, 1, p. 7e30.

Back to results | **1 of 1**　　　　　　　　　　　　　　　　　　　　　Top of page

About Scopus

What is Scopus

Content coverage

Scopus Blog

Scopus API

Language

日本語に切り替える

切换到简体中文

切換到繁體中文

Customer Service

Help and Contact

Live Chat

ELSEVIER

RELX Group™