BIBLIOGRAPHY

- Agir, Ahmet . (2014). What Are The Usage conditions of Web 2.0 Tools Faculty of Education Students?. Turkish Online Journal of Distance Education-TOJDE, July 2014 ISSN 1302-6488 Volume: 15 Number: 3 Article 14.
- Akella, Nirupama. (2014). Tweeting To Learn: Understanding Twitter through the Lens of Connectivism. *InSight: A Journal of Scholarly Teaching*, Volume 9.
- Al-Jeraisy, Mashael Nasser, et.al. "Web 2.0 in Education: The Impact of Discussion Board on Student Performance and Satisfaction." The Turkish Online Journal of Educational Technology 14.2 (April 2015): 247-258.
- Ansari, Urusa. 2013. Image of an Effective Teacher in 21st Century Classroom. *Journal of Educational and Instructional Studies in the World*. November 2013, Volume: 3 Issue: 4 Article: 08 ISSN: 2146-7463.
- Attwell, Graham. (2007) E-Portfolios the DNA of the Personal Learning Environment?, Journal of e-Learning and Knowledge Society, Vol. 3, No 2.
- (2007). The personal learning environments the future of eLearning? eLearning Papers 2(1). from http:// www.elearningeuropa.info / files/media/media/11561.pdf
-(2010). The future of learning environments. http://www.scribd.com/doc/35193585/
- Attwell, Graham and Jenny Hughes. (2010). *Pedagogic Approaches to Using Technology for Learning: Literature Review.* UK: Lifelong Learning.
- Aucoin, Robert Charles. 2014. A Study of Students' Perceptions of the Use of Web 2.0 Applications in Higher Education. retrieved on September 2016 from www.avantlearning.com
- Ayooluwa, Kolawole Priscilla. (2016). Use of Web 2.0 Technologies for Teaching and Learning in Selected Federal Universities in Southwest Nigeria. Dissertation. University of Kwazulu-Natal.
- Badan Standar Nasional Pendidikan (BSNP). 2010. *Paradigm Pendidikan Nasional Abad XXI*. from www.bsnp-indonesia.org/id/

(1971). Social Learning Theory. NY: General Learning Press.

n, A. & Lerman, S. (2006). Wireless laptops as means for promoting rning in large lecture halls. Journal of Research on Technology and 1, 38(3)

- Barnett , John, McPherson, Vance, and Sandieson, Rachel M. (2013). Connected teaching and learning: The uses and implications of connectivism in an online class. *Canada Australasian Journal of Educational Technology*, 29(5).
- Barone, C. A. (2003) The Changing Landscape and the New Academy. *EDUCAUSE Review*. 38(5).
- Batsila M., Ch. Tsihouridis, D. Vavougios. (2014). Entering the Web-2 Edmodo World to Support Learning: Tracing Teachers' Opinion after Using it in their Classes. *iJET* Volume 9, Issue 1.
- Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers & Education*, 39(4)
- Beard, Schwieger, and Surendran (2007). Bridging the Academic /Industrial Chasm for the Millennial Generation. *Information Systems Education Journal*, 5 (33).
- Bell, F. (2010). Connectivism: Its place in theory-informed research and innovation in technology-enabled learning. *International Review of Research in Open and Distance Learning*, 12, (3).
- Berners-Lee, Tim. (1996). The World Wide Web: Past, Present and Future. Retrieved December 2016 from http://www.w3.org/People/Berners-Lee/1996/ppf.html
- Bransford, J. D., Barron, B., Pea, R. D., Meltzoff, A., Kuhl, P., Bell, P., et al. (2006). Foundations and opportunities for interdisciplinary science of learning. In R. K. Sawyer, (Ed.), The Cambridge handbook of the learning sciences. New York: Cambridge University Press.
- Bryant , Jennings dan Susan Thompson. 2002. Fundamentals of Media Effect, McGraw Hill.
- Carreño , Ingrid del Valle García. (2014). Theory of Connectivity as an Emergent Solution to Innovative Learning Strategies. *American Journal of Educational Research*, vol. 2, no. 2.
- Cassandra , Chris, Johan Tambotoh, and Frederik Samuel Papilaya. (2015).

 Pemanfaatan MediaWiki sebagai Knowledge Management Tools untuk
 ng Implementasi E-Learning . *Jurnal Manajemen Teknologi* Vol.14

- Chatti, M. A., Jarke, M., & Frosch-Wilke, D. (2007). The future of e-learning: A shift to knowledge networking and social software. *International Journal of Knowledge and Learning*, Vol. 3.
- Chen., Wen-Pin. (2012). *Design of a Scrutable Learning System*. Doctoral Thesis. University of Southampton.
- Chetty, Denzil. (2013). Connectivism: Probing Prospects for a Technology-Centered Pedagogical Transition. *Religious Studies: Alternation Special Edition 10*) ISSN 1023-1757 09.
- Chin, Paul. (2004). *Using C&IT to Support Teaching*. NY: Taylor & Francis e-Library.
- Churcher ,Kalen M. A.,Edward Downsb, and Doug Tewksburya. (2014). "Friending" Vygotsky: A Social Constructivist Pedagogy of Knowledge Building Through Classroom Social Media Use. *The Journal of Effective Teaching an online journal devoted to teaching excellence* Vol. 14, No.1, 2014, 33-50.
- Cohen, Eli . (2002). Challenges of Information Technology Education in the 21st Century. UK: Idea Group Publishing.
- Cohen, Louis, Lawrence Manion, and Keith Morrison. (2007). Research Methods in Education (6th ed.). NY: Routledge.
- Cohen, Stanley. (1972). Folk Devils and Moral Panics. London: MacGibbon and Kee.
- Conradie, P. W. (2014). Supporting Self-Directed Learning by Connectivism and Personal Learning Environments. *International Journal of Information and Education Technology*, Vol. 4, No. 3, June.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, John. W. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4th ed.). Boston: Pearson Education.
- Cutshall, R., Changchit, C., & Elwood, S. (2006). Campus laptops: What logistical and technological factors are perceived critical? Educational Technology & Society, 9(3),
- de Freitas ,Sara and Chris Yapp (eds.). (2005). Personalizing Learning in the 21st

 UK: Network Educational Press.

PDF

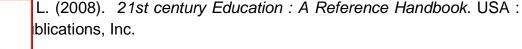
Optimization Software: www.balesio.com

a, S., Arquero, J. L., & Romero-Frías, E. (2015). Personal Learning ents Acceptance Model: The Role of Need for Cognition, e-Learning

- Satisfaction and Students' Perceptions. *Educational Technology & Society*, 18 (3).
- del Moral, M. Esther, Ana Cernea, and Lourdes Villalustre . (2013). Connectivist Learning Objects and Learning Styles. *Interdisciplinary Journal of E-Learning and Learning Objects* Volume 9.
- Dhot, Parvin. Unknown year. *An Introduction to the Social Development Theory . A theory created by Lev Vygotsky*. Retrieved on January 2016 from https://onlineacademiccommunity.uvic.ca/.
- Digilio J.J., Lynn-Nelson G. (2004). The millennial invasion: are you ready? *Information Outlook*, Vol 8 No 11.
- Donnelly, Roisin and Fiona McSweeney. (2009). *Applied E-Learning and E-Teaching in Higher Education*. NY: Information Science Reference. ISBN 978-1-59904-817-8.
- Donovan, Loretta, and Timothy Green. (2014). *Creating 21st Century Teaching and Learning Environments*. CA: Shell Educational Publishing, Inc. Drexler, Wendy. (2010). A Networked Learning Model for Construction of Personal learning environments in seventh Grade Life Science. *American Educational Research Association Conference Proceeding*.
- Downes, S. (2005). E-learning 2.0. eLearn Magazine. Retrieved from http://elearnmag.acm.org/featured.cfm?aid=1104968
- (2006). Learning networks and connective knowledge. Instructional Technology Forum: 92. Retrieved from http://it.coe.uga.edu/itforum/paper92/paper92.html
- Drent, M., & Meelissen, M. (2008). Which factors obstruct or stimulate teacher educators to use ICT innovatively? Computers & Education, 51(1)
- Eagleton , Maya B. , and Elizabeth Dobler. (2007). Reading the Web: Strategies for Internet Inquiry. NY: The Guilford Press.

arning Initiative (ELI). (2009). *The seven things you should know rsonal Learning Environments*. Downloaded on January 2016 from educause.edu/ir/

- Engeström, Y. (1987). Learning by expanding: An activity theoretical approach to developmental research. Helsinki, Finland: Orienta-Konsultit..
- Eren , Omer. (2015). Vocabulary Learning on Learner-Created Content by Using Web 2.0 Tools. *Contemporary Educational Technology* , 2015, 6(4). Gaziantep University, Turkey.
- Estable, Michelle Rogers-. (2014). Web 2.0 Use in Higher Education. *European Journal of Open, Distance and e-Learning* Vol. 17 / No. 2 131. ISSN 1027-5207.
- Evans , Michael J. (2009). Foreign-Language Learning with Digital Technology. NY : Continuum.
- Fiedler, S., Väljataga, T. (2011). Personal learning environments: concept or technology? *International Journal of Virtual and Personal Learning Environments*, 2(4), October-December.
- Fleischmann, Katja .(2014). Collaboration through Flickr & Skype: Can Web 2.0 Technology Substitute the Traditional Design Studio . *Higher Design Education?*. Contemporary Educational Technology , 5(1).
- Fraser, Josie.(2007). Open Complimenting Closed?. Retrieved on February 2016 from http:// eduspaces.net/ josiefraser/ weblog/ 169960.html
- Fry, Heather, and Steve Ketteridge, and Stephanie Marshall. (2009). A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice .3rd edition. NY: Taylor & Francis Group. ISBN 13: 978–0–203–89141–4
- Garcia, Elaine, Mel brown and Ibrahim Elbeltag. (2013). Learning Within a Connectivist Educational Collective Blog Model: A Case Study of UK Higher Education. *The Electronic Journal of e-Learning* Volume 11 Issue 3.
- Garner, J. Bradley . (2007). A Brief Guide for Teaching Millennial Learners. USA : Triangle Publishing.
- Garofalakis ,John D., Eirini V. Lagiou, and Athanasios P. Plessas. (2013). Use of Web 2.0 Tools for Teaching Physics in Secondary Education. *International Journal of Information and Education Technology*, Vol. 3, No. 1, February .
- Gay, L.R., Geoffrey E. Mills, and Peter Airasian. (2012). *Educational Research:* Competencies for Analysis and Applications. Boston: Pearson Education.



- Griffin , Patrick and Esther Care. (2015). Assessment and Teaching of 21st Century Skills: Methods and Approach. Dordrecht : Springer Science+Business Media
- Gulbahar, Yasemin. ICT Usage in Higher Education: A Case Study on Preservice teachers and Instructors. The Turkish Online Journal of Educational Technology TOJET January 2008 ISSN: 1303-6521 volume 7 Issue 1 Article 3.
- Hack, Catherine. (2013). Using Web 2.0 Technology to Enhance, Scaffold and Assess Problem-Based Learning . *JPBLHE*: VOL. 1, No. 1 .
- Häkkinen, P., & Hämäläinen, R. (2012). Shared and personal learning spaces: Challenges for pedagogical design. Internet and Higher Education, 15(4)
- Halim ,Noor Dayana Abd, Mohamad Bilal Ali, Noraffandy Yahaya. (2011).

 Personalized Learning Environment: Accommodating Individual Differences.

 Online Learning. International Conference on Social Science and Humanity
 IPEDR vol.5. IACSIT Press, Singapore.
- Hannafin, M. J., Orrill, C., Kim, H., & Kim, M. (2005). Educational technology research in post-secondary settings: Promise, problems and prospects. Journal of Computing in Higher Education, 16(2)
- Hanover Research , District Administration Practice . 2012. Best Practices in Personalized Learning Environments (Grades 4-9)
- Harden, R. M., & Crosby, J. R. (2000). The good teacher is more than a lecturer— The twelve roles of the teacher. Medical Teacher, 22(4),
- Herrington, A., & Herrington, J. (2006). Authentic Learning Environments in Higher Education. Hershey, PA: Information Science Publishing.
- Hill, Diane A. (2013). *Perceptions of Using Web 2.0 Tools for Students with ADHD or the Tendencies of ADHD.* Master's Thesis. Ohio University.
- Holliday W, Li Q (2004). Understanding the millennials: updating our knowledge about students. *Reference Services Review* Vol 32. No. 4. doi/abs/10.1108/00907320410569707
- Howe, N. and Strauss, W. (2000). Millennials Rising: The Next Great Generation. New York: Vintage Books.*

ter, and Jan Böttcher. (2015). Personal Learning Environments in arning Scenarios. *Working Conference "A New Culture of Learning: g and next Generations" Proceedings*. Andrej Brodnik, Cathy Lewin v 1st - 3rd, Vilnius University, Lithuania.

- Hung, Nguyen Manh, (2014). Using Ideas from Connectivism for Designing New Learning Models in Vietnam. *International Journal of Information and Education Technology*, Vol. 4, No. 1, February.
- Hye, Jeong Kim and Hwan Young Jang. (2015). Motivating Pre-service Teachers in Technology Integration of Web 2.0 for Teaching Internships. *International Education Studies;* Vol. 8, No. 8. Canadian Center of Science and Education College of Education, Dongguk University, Seoul.
- Inoue, Yukiko and Suzanne T. Bell. (2006). *Teaching with educational technology in the 21st century : the case of the Asia Pacific Region*. UK : Information Science Publishing.
- Ishtaiwa , Fawzi F. and. Samir J. Dukmak. (2013). Do Web 2.0 Applications Enhance Learning in Teacher Education in the UAE? An Exploratory Study. *International Journal for Research in Education (IJRE)* No. 33.
- Ito M., Horst H., Bittanti M., et.al (2010) Hanging Out, Messing Around, and Geeking Out. Kids Living and Learning with New Media. Cambridge, MA: The MIT Press.
- Jafari, A., McGee, P., & Carmean, C. (2006). Managing courses, defining learning: What faculty, students, and administrators want. *Educause Review*. Retrieved on September 2016 from http://www.educause.edu/ir/library/pdf/
- Jandrić ,Petar, and Damir Boras (Editors). (2015). *Critical Learning in Digital Networks*. Switzerland: Springer International Publishing.
- Jarvis, Peter and John Holford and Colin Griffin. (2003). *The Theory and Practice of Learning*. United States: Kogan Page Limited. ISBN 0-203-47241-1
- Jimoyiannis, Athanassios, et,al. (2013). Preparing teachers to integrate Web 2.0 in school practice: Toward a framework for Pedagogy 2.0. *Australasian Journal of Educational Technology*, 29(2).
- Johnson, L., Adams, S., & Cummins, M. (2012). The NMC Horizon Report: 2012 Higher Education Edition. Austin, Texas: The New Media Consortium. https://eric.ed.gov/?id=ED532397
- Jonassen, D. (1999). Designing constructivist learning environments. In C. M. Reigeluth (Ed.), Instructional design theories and models: A new paradigm of instructional theory, Vol. II (pp. 215–239). Mahwah, NJ: Lawrence Erlbaum
 - ., & Rohrer-Murphy, L. (1999). Activity theory as a framework for constructivist learning environments. Educational Technology and Development, 47(1).

- Junco, R., & Mastrodicasa, J. (2007). Connecting to the Net generation: What higher education professionals need to know about today's college students (1st ed.). Washington DC: NASPA (National Association of Student Personnel Administrators).
- Juskeviciene, Anita, Eugenijus Kurilovas. (2014). On Recommending Web 2.0 Tools to Personalise Learning. *Informatics in Education*, Vol. 13, No. 1.
- Kennedy, G. E., Judd, T. S., Churchward, A., Gray, K., & Krause, K.-L. (2008). First year students' experiences with technology: Are they really digital natives? Australasian Journal of Educational Technology, 24(1)
- Khalid, Irfan. (2010). Role of Web 2.0 technologies for Knowledge Building in Higher Education. Master Degree Project. Sweden: Linnaeus University.
- Khatibi, Mina and Mahboobeh Fouladchang . (2015) .Connectivism: A Review. *The International Journal of Indian Psychology* Volume 2, Issue 4.
- Khong, Hou Keat.(2015). Using Web 2.0 to Promote Spanish Language Learning in the Malaysian Context. *Journal of Interdisciplinary Research in Education (JIRE)* Vol. 5, Issue 1.
- King, Robert, Christopher Erickson, Janae Sebranek. (2012). *Inquire : A Guide to 21st Century Learning*. Wisconsin : Thoughtful Learning.
- Kizito , Rita Ndagire . (2016). Connectivism in Learning Activity Design: Implications for Pedagogically-Based Technology Adoption in African Higher Education Contexts . *International Review of Research in Open and Distributed Learning* Volume 17, Number 2 February .
- Koh, Caroline. (ed.) 2015. *Motivation, Leadership and Curriculum Design: Engaging the Net Generation and 21st Century Learners*. Singapore: Springer.
- Kompf, Michael and Pamela M.Denicolo. (2013). *Critical Issues in Higher Education*. Netherland: Sense Publishers. ISBN: 978-94-6209-046-0.
- A., Konstantinidis, Papadopoulos, Р. M., Tsiatsos, T., & Demetriadis, S. (2011).Selecting and **Evaluating** а Learning Management System: A Moodle Evaluation Based on, 9 (September),
- Kropf ,Dorothy C. .(2013). Connectivism: 21st Century's New Learning Theory. *European Journal of Open, Distance and e-Learning* – Vol. 16 / No. 2 13 ISSN 1027-5207.
 - 0). Adopting information technologies for instructional environments. Petrides (Ed.), Case studies on information technology in higher it implications for policy and practice. Hershey, PA: Idea Group Pub.

- Labrović,, Jelena Anđelković, Aleksandar Bijelić, Gordana Milosavljević. 2012. Mapping Students' Informal Learning Using Personal Learning Environment. International Symposium SymOrg 2012, 05 09 June 2012, Zlatibor, Serbia
- Larochelle, Marie, Nadine Bednarz, and Jim Garrison. (2006). *Constructivism and Education*. USA: Cambridge University Press. ISBN-13 978-0-521-62135-9.
- Lefrancois, Guy R. (2000). *Theories of Human Learning: What the Old Man Said.* 4th edition. USA: Wadsworth/Thomson Learning. ISBN 0-534-36220-6.
- Lennon, R. (2012). Bring your own device (BYOD) with cloud 4 education. Proceedings of the 3rd annual conference on Systems, programming, and applications: Software for humanity (pp.171–180). New York: ACM.
- Light, Daniel. (2012). Principals for Web 2.0 Success. Learning & Leading with Technology | June/July . Retrieved on February 2016 from https://eric.ed.gov/?id=EJ982841
- Liu, C., et.al (2016). The Impact of Peer Review on Creative Self-efficacy and Learning Performance in Web 2.0 Learning Activities. *Educational Technology & Society*, 19 (2).
- Livingstone, Kerwin A. (2015). The impact of Web 2.0 in Education and its potential for language learning and teaching. *International Journal of Instructional Technology and Distance Learning*, April, Volume 12 Number 4.
- Lubesky R. (2006). *The present and future of personal learning environments (PLE).*[Web log message]. Retrieved on February 2016 from http://www.deliberations.com. au/2006/12/present-and-future-of-personal-learning.html
- Lundy, Sarah Elizabeth, (2014). Leveraging Digital Technology in Social Studies Education. Dissertations. Paper 1743. Portland State University.
- Lyytinen, K., and Damsgaard, J. (2011).Inter-organizational information systems adoption a configuration analysis approach. *European Journal of Information Systems* (18:1).
- Majid, Nazatul Aini Abd .(2014). Integration of Web 2.0 Tools in Learning a Programming Course. *TOJET: The Turkish Online Journal of Educational Technology* October 2014, volume 13 issue 4.

Manuel K (2002) Teaching Information Literacy to millennial generation. *Journal of aministration*. 36(1/2)

)12). 6 possible roles for teachers in a personalized learning ent. Teach thought Staff. Retrieved on December 2016 from v.teachthought.com/author/teachthoughtstaff/

- Mayberry, Sarah C., (2014). A Mixed Methods Case Study Exploring the Outcomes of Implementing a Digital Learning Management System In A Fourth Grade Language Arts Classroom. Electronic Theses & Dissertations. Paper 1153. Georgia Southern University, Digital Commons@Georgia Southern.
- McCrindle M. .(2003). Understanding Generation Y. *Principal Matters*. Vol. 55. Retrieved on December 2015 from https://search.informit.com.au/
- McGloughlin, C., & Lee, M. J. W. (2010). Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. Australasian Journal of Educational Technology, 26(1)
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. SAGE publications, Inc.
- Moore, Gary C., and Izak Benbasat. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. Information Systems Research 2:3.
- Moral, and Lourdes. (2013). Connectivist Learning Objects and Learning Styles. Interdisciplinary Journal of E-Learning and Learning Objects Volume 9, 2013. Villalustre University of Oviedo, Spain.
- Nussbaum-Beach, S. and Hall, L.R. (2012). *The connected educator: Learning and leading in a digital age.* Bloomington, IN: Solution Tree.
- Nykvist, S. S. (2012). The trials and tribulations of a BYOD science classroom. In Y., Shengquan (Ed.), Proceedings of the 2nd International STEM in Education Conference (pp. 331–334). Beijing, China: Normal University Beijing
- Oblinger, D. G., & Oblinger, J. L. (2005). *Educating the Net Generation*: EDUCAUSE. Retrieved on January 2017 from https://www.educause.edu/
- Obura, Constant Okello and Francis Sekitto. (2015). Web 2.0 Technologies Application in Teaching and Learning by Makarere University academic Staff. DigitalCommons@University of Nebraska Lincoln Library Philosophy and Practice (e-journal).
- Olcott, D. J. (2014). (In-Press). Building digital bridges to the future: A primer for ministry leaders for school transformation via public & private educational partnerships. Microsoft Worldwide Education White Paper Series. Seattle: Microsoft.



11). Using Web 2.0 Resources to Enhance Literature Studies. The Graduate School of University of Wisconsin-Stout, Menomonie, eved on January 13, 2016 from

- Orehova cki, T., et al., (2013). Evaluating the perceived and estimated quality in use of Web 2.0 applications. *Journal System Software*. Retrieved on March 2016 from http://www.sciencedirect.com/science/article/pii/S0164121213001362
- O'Reilly, Tim. (2006). What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software. O'Reilly Media, Inc., tim@oreilly.com. Retrieved on December 2105 from https://mpra.ub.uni-muenchen.de/4580/
- Osika, E. R. & Sharp, D. P. (2002). Minimum technical competencies for distance learning students. Journal of Research on Technology in Education, 34(3)
- Ozan, Ozlem. (2013). Scaffolding in Connectivist Mobile Learning Environment.

 Turkish Online Journal of Distance Education-TOJDE April 2013 ISSN 1302-6488 Volume: 14 Number: 2 Article 1.
- Palfrey, John and Urs Gasser. 2008. Born Digital: Understanding the First Generation of Digital Natives. NY: Basic Books.
- Parvathi, M., and R. Mariselvi. 2017. A bird's eye on the Evolution Web 1.0 to Web 5.0: Lib 1.0 to Lib 5.0. *International Journal of Advanced Research Trends in Engineering and Technology (IJARTET)* Vol. 4, Special Issue 4.
- Pata, K., Väljataga, T., Tammets, K. (2011). Considering Students' Perspectives on Personal and Distributed Learning Environments in Course Design. Web 2.0 Based E-learning: Applying Social Informatics for Tertiary Teaching. Nova lorque: Information Science Reference.doi:10.4018/978-1-60566-294-7.ch005
- Paul, P. (2001) Getting Inside Gen Y. American Demographics, 23(9).
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3).
- Perikos I., Grivokostopoulou F., Kovas K. and Hatzilygeroudis I. 2016. Exploring the Educational Capabilities of Social Media in High Schools. DOI: 10.5220/0005810502400248 In Proceedings of the 8th International Conference on Computer Supported Education (CSEDU 2016), pages 240-248 ISBN: 978-989-758-179-3 2016 by SCITEPRESS Science and Technology Publications, Lda.
 - 001). *Digital natives, digital immigrants*. On the Horizon, 9(5). on January 2016 from http://www.emeraldinsight.com
 - 12). Before bringing in new tools, you must first bring in new thinking. une. Retrieved on March 2016 from http://marcprensky.com/writing/

- Price, Christy. Five Strategies to Engage Today's Students. Magna Online Seminar. 1 Nov. 2011.
- Pritchard, Alan, and John Woolard. 2010. *Psychology for the classroom: constructivism and social learning*. NY: Routledge.
- Pritchett , Christopher G., Christal C. Pritchett, and Elisha C. Wohleb. (2013). Usage, Barriers, and Training of Web 2.0 Technology Applications . *SRATE Journal Summer* Vol. 22, Number 2. Retrieved on January 2016 from https://eric.ed.gov/?id=EJ1015771
- Pursel, Barton K. and . Hui Xie (2014). Patterns and Pedagogy: Exploring Student Blog Use in Higher Education. *Contemporary Educational Technology*, 2014, 5(2).
- Ramanau, R., Hosein, A., & Jones, C. (2010). Learning and living technologies: a longitudinal study of first-year students' expectations and experiences in the use of ICT. *Proceeding: The 7th International Conference on Networked Learning, Aalborg, Denmark.* doi/abs/10.1080/17439884.2010.529913
- Regina ,Luttrell , and Karen McGrath. 2015. *The Millennial Mindset : Unraveling Fact from Fiction*. London : Rowman & Littlefield Publishing Co.
- Riady, Yasir . (2014). Assisted Learning Through Facebook : A Case Study of Universitas Terbuka's Students Group Communities In Jakarta, Taiwan And Hong Kong. *Turkish Online Journal of Distance Education-TOJDE* April 2014 ISSN 1302-6488 Volume: 15 Number: 2 Article 17.
- Rogers, E. M. (1986). Communication: The new media in society. New York: The Free Press
- (1983). Diffusion of Innovation (3rd ed.). NY: MacMillan Publishing Co.
- Rosen, Dina and Charles Nelson. (2008). Web 2.0: New generation of Learners and Education. *Education Resources Information Center (ERIC)* Journal. No: EJ835762.
- Salinas, M. F. (2008). From Dewey to Gates: A model to integrate psychoeducational principles in the selection and use of instructional technology. *Computers & Education*, 50(3)
- Sangrà, A. and Wheeler, S. (2013). New informal ways of learning: Or are we formalizing the informal? *RUSC*, 10(1).
 - (2012). Learning Theories: An educational Perspective. 6th edition. Pearson Education, Inc. ISBN-13: 978-0-13-707195-1.

- (2006). *Knowing Knowledge*. ISBN 978-1-4303-0230-8. Retrieved on February 2016 from www.knowingknowledge.com

2. No. 1. January 2005 / ISSN 1550-6908.

-(2008). Learning and Knowing in Networks: Changing roles for Educators and Designers. Presented to ITFORUM for Discussion. Retrieved on March 2016 from https://www.calvin.edu/~dsc8/documents
- Siemens ,Raymond and David Moorman. 2006. *Mind Technologies : Humanities Computing and the Canadian Academic Community.* Canada : University of Calgary Press.
- Siemens, Raymond and Susan Schreibmean. (2013). *Digital Literacy Studies*.. UK: Blackwell Publishing Ltd.
- Siregar, Dicke, JSH. (2010). Personal Learning Environment. *Majalah Ilmiah IC Tech* Vol 5 No 1, Januari.
- Starlink. (2004). Educating the Net Gen: Strategies that work. Participant Packet. Retrieved on January 2016 from http://www.starlinktraining.org/
- Sudrajat, Akhmad. (2012). *Generasi Z dan Implikasinya terhadap Pendidikan*. Blog Pendidikan. Retrieved on March 2016 from http://www.akhmadsudrajat.wordpress.com
- Sugiyono. (2016). *Metode Penelitian Manajemen*. Bandung: Alfabeta. ISBN: 978-602-7825-66-6.
- Swales, John. 1990. *Genre Analysis: English in Academic and Research Settings.*Cambridge: Cambridge UP.
- Sweeney, Richard (2006). Millennial Behaviors & Demographics. Retrieved on March 2016 from http://unbtls.ca/teachingtips/
- Tapscott, D. (1998). Growing up digital: The rise of the net generation. New York: McGraw-Hill
 - (1009). Educating the Net Generation. *Educational Leadership*, 56(5), 6.
 - hael . (2011). *Deconstructing Digital Natives: Young People, gy and the New Literacies.* NY : Routledge Companion.

- Trilling, Bernie and Charles Fadel. (2009). 21st Century Skills: Learning for Life in Our Times. San Francisco: Jossey-Bass A Wiley Imprint.
- Tucker, Shelia Y.. (2014). Transforming Pedagogies: Integrating 21st Century Skills and Web 2.0 Technology. *Turkish Online Journal of Distance Education-TOJDE* January. ISSN 1302-6488 Volume: 15 Number: 1 Article 12.
- Tzu-Bin Lin, Victor Chen, and Ching Sing Chai. (2015). *New Media and Learning in the 21st Century: A Socio-Cultural Perspective*. Springer Science+Business Media Singapore.
- Ughade, Ashish. (2007). Personal Learning Environment: Design Factors and Implementation. Dissertation. University of Manchester.
- Usman ,Shuaibu Hassan and Ishaq Oyebisi Oyefolahan.(2014). Encouraging Knowledge Sharing Using Web 2.0 Technologies in Higher Education: A Survey. *International Journal of Managing Information Technology (IJMIT)* Vol.6, No.2, .
- van Harmelen, M. (2006) *Personal Learning Environments*. Retrieved on January 2016 from http://www.cs.man.ac.uk/~mark/
- Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wan Guofang, and Dianne M. Gut (eds.). (2011). *Bringing Schools into the 21st Century*. NY: Springer Science+Business Media.
- Weller, Alan .(2013). The use of Web 2.0 technology for pre-service teacher learning in science education . *Research in Teacher Education* Vol.3, No.2. October .
- William, Roy., .Jenny Mackness. Regina Karousou. (2011). Emergent Learning and Learning Ecologies in Web 2.0 *International Review of Research in Open and Distance Learning* Vol. 12.3 March.
- Wolf, M.A.. (2012). Innovate to Educate: System (Re)Design for Personalized Learning. A Report from the ASCD Symposium 2010. *Hanover Research: District Administration Practice*. *Best Practices in Personalized Learning Environments* (Grades 4 9). Retrieved on January 2016 from http://www.hanoverresearch.com/
- Yoo, S.J. and Kim, S. (2013) 'How and why college students use Web 2.0 applications: the role of social media in formal and informal learning', nal Journal of Web Based Communities, Vol. 9, No. 2.
 - I. (2009). Teaching with Web 2.0 Technologies: Benefits, Barriers t Practices. College of Liberal Arts and Education Texas A&M

- University-Texarkana. Retrieved on August 2017 from www.aect.org/pdf/proceedings09/2009/09_1.pdf
- Yusof, Siti Ilyana Mohd, Nor Hasbiah Ubaidullah, Zulkifley Mohamed. (2015). Connecting Web 2.0 to Connectivism in Supporting Students' Learning. Global Journal of Business and Social Science Review. GJBSSR, Vol. 1 (1), January-March ISSN 2289-8506.
- Zelick, Stacia Ann.(2013). The Perception of Web 2.0 Technologies on Teaching and Learning in Higher Education: A Case Study. *Creative Education 2013. Vol.4, No.7A2*, .
- Zettersten , Arne . (1986). *New Technologies in Language Learning*.. Oxford : Pergamon Press



Appendix 1. Questionnaire Part A: Demographic questions

Instruction: Please fill in the following questions! In which year were you born?

A. Aims

- 1. To indicate whether the sample are categorized as the millennial learners by classifying their ages
- 2. To uncover the barriers of learners in using computer by signifying their home community,

B. Indicators

2.

Rural

- 1. The researcher can indicate whether the sample are categorized as the millennial learners by classifying their ages
- 2. The researcher can uncover the barriers of learners in using computer by signifying their home community

Urban

This questionnaire is adapted from Khalid (2010) who investigates and describes the educational importance of Web 2.0 especially Podcasts, Wikis, and Blogs as possible sources to facilitate class room learning in higher education in Sweden.

How would you describe your home community? Put a tick $(\sqrt{})$

Appendix 2. Questionnaire Part B : Technology awareness	
 A. Aims: To record the learners' experience in using computer and internet B. Indicators: The researcher can record the learners' experience in computer and internet 	using
This questionnaire is adapted from Khalid (2010) who investigates and describe educational importance of Web 2.0 especially Podcasts, Wikis, and Blog possible sources to facilitate class room learning in higher education Sweden. In this regard, the researcher adds some ICT tools that are postaccessed by students (android smartphone, iPhone, tablet, iPad, and Phablet).	s as n in
Instruction : Please fill in the following questions! 1. How long have you been using a computer? Put a tick (√) Less than 1 year 1-3 years 4-6 years 7-9 years More than 10 years 2. How long have you been using Web 2.0 tools? Put a tick (√)	
Less than 1 year 1-3 years	
ars ars than 10 years n do you go online when not at school? Put a tick (√) Rarely Always	
ptimization Software: www.balesio.com	

Appendix 3. Questionnaire Part C : Learners' access level on ICT tools

- A. Aims: To signify how the learners' access level on ICT tools
- B. Indicators: The researcher can signify the learners' access level on ICT tools This questionnaire is adapted from Khalid (2010) who investigates and describes the educational importance of Web 2.0 especially Podcasts, Wikis, and Blogs as possible sources to facilitate class room learning in higher education in Sweden. In this regard, the researcher adds some ICT tools that are possibly accessed by students (android smartphone, iPhone, tablet, iPad, and Phablet) Instruction : Please put a tick ($\sqrt{}$) in the chosen column.

	Types of ICT tools	Access exclusively for my own use	Limited or inconvenient	No access	Not used
1	Desktop computer				
2	Portable computer (laptop, notebook)				
3	Android smartphone				
4	iphone				
5	Web cam				
6	Cable internet access (Speedy home net, indiehome, etc)				
7	Wireless internet access (Bolt, Wifi hotspot, etc)				
8	Tablet				
9	iPad				
10	Phablet				
11	Others				



Appendix 4. Questionnaire Part D : Learners' Internet activities

- A. Aims: To record how the learners have been using internet in each way over the past year
- B. Indicators: The researcher can record how the learners have been using internet in each way over the past year

This questionnaire is adapted from Khalid (2010) who investigates and describes the educational importance of web 2.0 especially Podcasts, Wikis, and Blogs as possible sources to facilitate class room learning in higher education in Sweden. In this regard, the researcher adds some different ways in using internet. They are as follows: to send and receive emails, submit assignments, watch/download videos/music, to play games, to chat with friends, share photos/pictures, socialize with friends by using social medias.

Instruction : Please indicate how you have been using internet in each way over the past year. Please put a tick $(\sqrt{})$ in the chosen column!

	Activities	Never	Rarely	Often	Always	
1	To access learning resources					
2	Use the web for other services (e.g. banking, paying bills)					
3	To send or receive email					
4	To keep your own blog or vlog					
5	To read other people's blogs or vlogs					
6	To contribute to the development of a wiki					
7	To join online group discussion (collaboration)					
3	To submit assignments or tests					
9	Sharing learning materials					
10	News update					
11	To communicate with lecturers					
12	Watch or download/upload videos					
13	Watch or download/upload music					
14	To play online games					
15	To chat with my friends					
16						
17	To socialize with friends via social medias (Instagram, Facebook, Path, Line,					



Appendix 5. Questionnaire Part E : Frequency of using Web 2.0 technologies for learning

- A. Aims: To register how frequently the learners have used the Web 2.0 technologies for learning.
- B. Indicators: The researcher can register how frequently the learners have used the Web 2.0 technologies for learning.

This questionnaire is adapted from Alajmi (2011) who explores students' perceptions of adopting Web 2.0 applications at the School of Basic Education (SBE) in Kuwait.. In this regard, the researcher adds some Web 2.0 tools that are possibly accessed by students (vlogs, BlackBerry Messenger, Instagram, Google Plus, WhatsApp, LinkedIn, Path, Line, Facebook Messenger, Telegram, and Edmodo).

Instruction: How frequently have you used the following Web 2.0 technologies for learning? Please tick ($\sqrt{}$) appropriately, those that apply to you.

No.	Web 2.0 tools	Never	Rarely	Often	Always
1	Blogs		-		
2	Vlogs				
3	Blackberry				
	Messenger				
4	You Tube				
5	Twitter				
6	Facebook				
7	Instagram				
3	Skype				
)	Google Plus				
0	WhatsApp				
11	LinkedIn				
12	Path				
13	Line				
14	Facebook				
	Messenger				
15	Telegram				
16	Edmodo				
17	Tumblr				
18	Pinterest				
19	Four Square				
20	Slide Share				
21	Others				



Appendix 6. Questionnaire Part F: Learners' attitude to the use of Web 2.0

- A. Aims :To illustrate how the learners' attitude towards the use of Web 2.0 technologies in learning.
- B. Indicators: The researcher can illustrate how the learners' attitude towards the use of Web 2.0 technologies in learning.

The researcher constructs this questionnaire by synthesizing two writers, namely Ayooluwa (2016), who investigates the extent of use of Web 2.0 technologies for teaching and learning (TAL) purposes in selected federal universities in southwest Nigeria; and Aucoin (2014) who explores the views of adult learners in online university programs with respect to their relationships with interactive, web-based technologies in their learning, personal and work environments.

Instruction: Indicate your attitude towards use of Web 2.0 technologies for learning purposes.

Which of the following best describe your attitude toward using of Web 2.0?

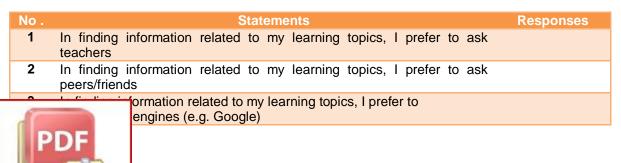
No .	Statements	Responses
1	I am skeptical of Web 2.0 technologies and use them only when I	
	have to	
2	I am usually one of the last people to know about Web 2.0	
3	I usually use Web 2.0 at about the same time as my friends do	
4	I love Web 2.0 and usually the first to try them	

Appendix 7. Questionnaire Part G: Learners' preference in finding information

- A. Aims: To illustrate how the learners' preference in finding information related to their subjects
- B. Indicators: The researcher can illustrate how the learners' preference in finding information related to their subjects

This study constructed this questionnaire by synthesizing two writers, namely Ayooluwa (2016), who investigates the extent of use of Web 2.0 technologies for teaching and learning (TAL) purposes in selected federal universities in southwest Nigeria; and Aucoin (2014) who explores the views of adult learners in online university programs with respect to their relationships with interactive, web-based technologies in their learning, personal and work environments.

Which of the following best describe your preference in finding information related to your learning topics?



Appendix 8. Questionnaire Part H: Learners' Expectation on Web 2.0

- A. Aims: To acknowledge how the learners' expectation towards the use of Web 2.0 technologies for learning in the future
- B. Indicators: The researcher can acknowledge how the learners' expectation towards the use of Web 2.0 technologies for learning in the future

The researcher constructs this questionnaire by synthesizing two writers, namely Avooluwa (2016), who investigates the extent of use of Web 2.0 technologies for teaching and learning (TAL) purposes in selected federal universities in southwest Nigeria

Instruction: Indicate how you expect to use Web 2.0 technologies for learning purposes in the future.

No .	Statements	Responses
1	I expect no Web 2.0 tools in class	
2	I expect limited Web 2.0 tools in class	
3	I expect using Web 2.0 tools in class extensively	

Appendix 9. Questionnaire section 1: Learners' rate of DOI

- A. Aims: To identify the characteristics of an innovation which affect the rate of diffusion of an innovation. They are relative advantage, compatibility, complexity/ease of use, observability, and trialability
- B. Indicator: The researcher can identify the characteristics of an innovation which affect the rate of diffusion of an innovation. They are relative advantage, compatibility, complexity/ease of use, observability, and trialability

This questionnaire is adapted from Moore and Benbasat's (1991) study who examine the diffusion of new information technology; they propose to test this set of characteristics in the context of the adoption of Personal Work Stations (PWS) by individuals. Therefore in this study, researcher modified the instrument, since she uses the adoption of Web 2.0 for millennial learners.

Instruction : Please put a tick ($\sqrt{}$) in the chosen column!

A. Relative Advantage (The degree to which a technology is considered as a better alternative to the current available tools)

No	St	atements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Web 2.0 technologies.	ologies is required by					
2	Web 2.0 help r	ne to find and					
	PDF	mation plogies serves urately plogies provide up-to- n. plogies help me to ive ideas					
1 2 1 7 2 2 2 2 2 2 2 2	ization Software: w.balesio.com		146				

B. Compatibility (The degree of its consistency with the existing values, past experiences, and needs of potential adopters)

No	Statements	Very Compatible	Compatible	Neutral	Incompatible	Very Incompatible
1	Using Web 2.0 for school/university curriculum					
2	Using Web 2.0 in the digital learning environment					
3	Using Web 2.0 technologies as individual learning tools					
4	Web 2.0 technologies are needed by society					
5	Web 2.0 technologies is acceptable as new technology					

C. Complexity (The degree of its complexity of use in learning)

No.	Activities	Very Complex	Complex	Neutral	Simple	Very Simple
1	Register an individual account.					
2	Sharing photos/pictures					
3	Sharing videos					
4	Sharing audios/voices					
5	Sharing files					
6	To interact with friends.					
7	To collaborate with my peers.					
8	To conduct scientific group discussion					
9	Submitting tasks					

D. Trialability (The degree to which an innovation may be experimented with before a commitment is made to use it)

No.	Activities	Very triable	Triable	Neutral	Untriable	Very untriable
1	Web 2.0 's features for learning needs					
2	Performing live videos					
3	Conducting teleconferences					
4	Conducting online					



E. Observability (the degree to which the results of an innovation are observable and communicable to others)

No.	Activities	Very Observable	Observable	Neutral	Unobservable	Very unobservable
1	Web 2.0 's features for learning needs					
2	Performing live videos					
3	Conducting teleconferences					
5	Conducting online group discussion					



Appendix 10. Questionnaire Part J: Identifying the aspects of PLE

- A. Aim: To record the Web 2.0 tools used by the learners for reading, reflecting and socializing.
- B. Indicator: the researcher can record the Web 2.0 tools used by the learners for reading, reflecting and socializing.

This questionnaire is adapted from Gallego and Gamiz (2014) who analyze the elements that compose the PLE of pre-service teachers and to determine whether the composition of these environments is related to academic achievement in a course on Information and Communication Technologies in Education.

Aspect of PLE 1	Lingkari perangkat Web 2.0 yang anda gunakan
Tools for reading: information sources that student access that provide them with this information in the form of an object or artifact	 Facebook: Vlog (Video blog): Blog WhatsApp Tumblr: LinkedIn: Twitter: Telegram: YouTube: Google Plus Edmodo: Path: Slide Share: Pinterest: Google Classroom: 16. 17. 18. 19. 20.



Aspek PLE 2	Lingkari perangkat Web 2.0 yang anda gunakan
Tools for reflection: environments or services in which student can transform information (places where they write, comment, analyze, publish)	1. Facebook:
	2. Telegram:
	3. YouTube:
	4. WhatsApp:
	5. BlackBerry Messenger:
	6. LinkedIn:
	7. Slide Share :
	8. Tumblr:
	9. Pinterest :
	10. Google Plus :
	11. Edmodo:
	12. Path:
	13. Vlog (Video blog):
	14. Blog :
	15. Google Classroom
	16.

Aspek PLE 3	Lingkari perangkat Web 2.0 yang anda gunakan
Tools for socializing: environments where student socializes with other people from/with whom they learn	1. Facebook : 82
	2. Instagram : 91
	3. LINE: 30
	4. WhatsApp : 88
	5. BlackBerry Messenger: 43
	6. LinkedIn: 0
	7. Twitter: 0
	8. Telegram : 41
	9. YouTube: 0
	10. Google Plus : 37
	11.Edmodo: 0
	12. Path : 0
	13. Vlog (Video blog) :0
	14.Blog: 0
	15.Skype : 0
	16. Google Classroom: 32
	17. Slide Share: 0
	18.Tumblr: 0
	19. Pinterest: 0
	20. Facebook Messenger : 48
	21.

Appendix 11. List of Interview

These following questions extracted from Ayooluwa (2016)

- 1. Did your class use the Web 2.0 technology? Which one of Web 2.0 technology were used? (if you say NO, please skip question No.2)
- 2. How was Web 2.0 used in the course? What were some of the general activities in the course?
- 3. Do you think Web 2.0 technologies are necessary tools for teaching and learning? Why?
- 4. What factors do you think constrain the use of Web 2.0 technologies for teaching and

learning and what solutions can be offered?

These following questions extracted from Aucoin (2014).

- 1. How would you describe your learning experience when used Web 2.0 technologies in the class? Were you excited? Confused?
- 2. If you had a choice would you take another class that uses Web 2.0?
- 3. Do you and your peers help each other in using Web 2.0?

