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Competency assessment of short free text answers (Conference Paper)

Lajis, A.^a [✉](#), Aziz, N.A.^b [✉](#)^aMalaysian Institute of Information Technology, Universiti Kuala Lumpur, Kuala Lumpur, Malaysia^bKulliyah of Information and Communication Technology, International Islamic University Malaysia, Gombak, Selangor, Malaysia

Abstract

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The increased adoption of competency-based education has posed the need of an automated competency assessment. Most of the existing assisted assessment does not cater for competency assessment. The high percentage on the use of short free text answer as competency assessment shows that the need of the competency assisted assessment is urgent. This paper studies on the need and also review on existing assisted assessments focusing on short free text answer. A Node Link (NL) Scoring technique is proposed as an alternative automated solution to assess learners' competency in short free text answers. © 2014 IEEE.

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-
- ☐ 1 Pepper, D.
(2012) *KeyCoNet 2012 Literature Review. Assessment for Key Competences*. Cited 2 times.
24 February 2014
<http://keyconet.eun.org/c/documentlibrary/getfile?uuid=41099a9ba557-490c-9955-fb958530e8bd&groupId=11028>
-
- ☐ 2 (2010) *Perangkaan Pengajian Tinggi Malaysia*. Cited 9 times.
MOHE assessed 22 February 2014
<http://www.mohe.gov.my/webstatistik/perangkaan2010.pdf>
-
- ☐ 3 Thelwall, M.
Computer-based assessment: A versatile educational tool
(2000) *Computers and Education*, 34 (1), pp. 37-49. Cited 82 times.

View at Publisher
-
- ☐ 4 Bull, J., McKenna, C.
(2004) *Blueprint for Computer-assisted Assessment*. Cited 119 times.
London: Routledge Falmer
-
- ☐ 5 Mills, C., Potenza, M., Fremer, J., Ward, C.
(2002) *Computer-based Testing Building the Foundation for Future Assessment*. Cited 65 times.
New Jersey: Laurence Erlbaum Associates
-
- ☐ 6 Robinson, C.L., Hernandez-Martinez, P., Stephen Broughton, S.
(2012) *Mathematics Lecturers' Practice and Perception of Computer Assisted Assessment*, pp. 105-117. Cited 3 times.
Mapping University Mathematics Retrieved from: 22 February 2014
http://mathstore.ac.uk/headocs/MU-MAP_0.pdf
-
- ☐ 7 Chung, G.K.W.K., Baker, E.L.
An exploratory study to examine the feasibility of measuring problem-solving processes using a click-through interface
(2003) *Journal of Technology, Learning, and Assessment*, 2 (2), pp. 1-30. Cited 22 times.
<http://www.bc.edu/research/intasc/jtla/journal/v2n2.shtml>

View at Publisher
-
- ☐ 8 Hunt, N., Hughes, J., Rowe, G.
Formative automated computer testing (FACT)
(2002) *British Journal of Educational Technology*, 33 (5), pp. 525-535. Cited 8 times.

View at Publisher
-
- ☐ 9 Lajis, A., Aziz, N.A.
NL scoring and bloom competency test: An experimental result
(2012) *Proceedings of the 6th International Conference on Ubiquitous Information Management and Communication, ICUIMC'12*, art. no. 85.
ISBN: 978-145031172-4
doi: 10.1145/2184751.2184852

View at Publisher
-

-
- ☐ 10 Hager, P., Gonczi, A., Athanasou, J.
General Issues about Assessment of Competence
(1994) *Assessment & Evaluation in Higher Education*, 19 (1), pp. 3-16. Cited 64 times.
doi: 10.1080/0260293940190101
[View at Publisher](#)
-
- ☐ 11 Bloom, B.
(1956) *Taxonomy of Educational Objectives: The Classification of Educational Goals: Handbook i*. Cited 276 times.
Longman New York
-
- ☐ 12 Jennings, E.T.
(1989) *Accountability, Program Quality, Outcome Assessment and Graduate Education for Public Affairs and Administration, Graduate Education for Public Affairs and Administration*, pp. 438-446.
Sept/Oct
-
- ☐ 13 Moris, A.H.
A new paradigm in assessment: Competency base
(2013) *Education Conference 2013*
April 2-4 2013
-
- ☐ 14 Sitthisak, O., Gilbert, L., Soonklang, T.
Integrating competence models with KST for assessment
(2007) *CAA 2007*
-
- ☐ 15 Krathwohl, D.R., Bloom, B.S., Masia, B.B.
(1964) *Taxonomy of Educational Objectives [Handbook 2: Affective Domain]*. Cited 80 times.
London: Longman.
-
- ☐ 16 Harrow, A.J.
(1972) *Taxonomy of the Psychomotor Domain: A Guide for Developing Behavioral Objectives*. Cited 170 times.
London: Longman
-
- ☐ 17 Bishop, P.
Report on Assessment for a purpose workshop
(2002) *MSOR Connections*, 2 (3), p. 54.
-
- ☐ 18 Paterson, J.S.
Linking on-line assessment in mathematics to cognitive skills
(2002) *6th International Computer Assisted Assessment Conference*
July Paper presented at the organized by Loughborough University
-
- ☐ 19 Wiemer-Hastings, P., Wiemer-Hastings, K., Graesser, A.
How is latent semantic analysis?
(1999) *16th International Joint Congress on Artificial Intelligence Stockholm, Sweden*
July Paper presented at the
-

-
- ☐ 20 Jordan, S., Mitchell, T.
e-Assessment for learning? The potential of short-answer free-text questions with tailored feedback

(2009) *British Journal of Educational Technology*, 40 (2), pp. 371-385. Cited 44 times.
doi: 10.1111/j.1467-8535.2008.00928.x

View at Publisher
-
- ☐ 21 Girju, R., Moldovan, D., Badulescu, A.
Automatic discovery of part-whole relations

(2006) *Computational Linguistics*, 32 (1), pp. 83-135. Cited 140 times.
<http://www.mitpressjournals.org/doi/pdf/10.1162/coli.2006.32.1.83>

View at Publisher
-
- ☐ 22 Qian, Z., Xianyi, C.
The opportunities and challenges of information extraction

(2008) *Proceedings - 2nd 2008 International Symposium on Intelligent Information Technology Application Workshop, IITA 2008 Workshop*, art. no. 4732009, pp. 597-600. Cited 3 times.
ISBN: 978-076953505-0
doi: 10.1109/IITA.Workshops.2008.165

View at Publisher
-
- ☐ 23 Wang, H., Lu, Y., Shao, H.
Text information extraction based on OWL ontologies

(2008) *Proceedings - 5th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2008*, 4, art. no. 4666387, pp. 217-222. Cited 7 times.
ISBN: 978-076953305-6
doi: 10.1109/FSKD.2008.311

View at Publisher
-
- ☐ 24 Grishman, R.
(1997) *Information Extraction: Techniques and Challenges Information Extraction (International Summer School SCIE-97)*
ed Maria Teresa Pazienza, Springer-Verlag
-
- ☐ 25 Mark, J.
A Simple Pattern-Matching algorithm for recovering empty nodes and their antecedents
(2002) *40th Annual Meeting of the Association for Computational Linguistics, ACL 02, Philadelphia, PA, USA July*
-
- ☐ 26 Heid, U.
A linguistic bootstrapping approach to the extraction of term candidates from german text

(1998) *Terminology*, 5 (2), pp. 161-181. Cited 13 times.
doi: 10.1075/term.5.2.06hei

View at Publisher
-
- ☐ 27 Andersson, B.
(2002) *LNCS*, 2553, pp. 64-75.
NLDB 2002 (Eds.) Springer-Verlag Berlin Heidelberg
-

-
- ☐ 28 Pappuswamy, U., Bhembé, D., Jordan, P.W., Vanlehn, K.
A multi-tier NL-knowledge clustering for classifying students' essays
 (2005) *Proceedings of the Eighteenth International Florida Artificial Intelligence Research Society Conference, FLAIRS 2005 - Recent Advances in Artificial Intelligence*, pp. 566-571. Cited 3 times.
 ISBN: 1577352343
-
- ☐ 29 Káki, M.
Findex: Search result categories help users when document ranking fails
 (2005) *CHI 2005: Technology, Safety, Community: Conference Proceedings - Conference on Human Factors in Computing Systems*, pp. 131-140. Cited 78 times.
 ISBN: 1581139985; 978-158113998-3
-
- ☐ 30 Hearst, M.A.
Clustering versus faceted categories for information exploration
 (2006) *Communications of the ACM*, 49 (4), pp. 59-61. Cited 223 times.
<http://delivery.acm.org/10.1145/1130000/1121983/p59-hearst.pdf?key1=1121983&key2=5881640511&coll=ACM&dl=ACM&CFID=73799063&CFTOKEN=37325014>
-
- ☐ 31 Sargeant, J., Wood, M.M., Anderson, S.M.
A human-computer collaborative approach to the marking of free text answers
 (2004) *8th International Conference on Computer Aided Assessment*, pp. 361-370. Cited 9 times.
 Loughborough University, Loughborough, UK
-
- ☐ 32 Wood, M.M., Jone, C., Sargeant, J., Reed, P.
Lightweight Clustering Techniques for Short Text Answer in HCC CAA
-
- ☐ 33 Carter, J., Ala-Mutka, K., Fuller, U., Dick, M., English, J., Fone, W., Sheard, J.
How shall we assess this?
 (2003) *Proceeding ITiCSEWGR '03 Working Group Reports from ITiCSE on Innovation and Technology in Computer Science Education*, pp. 107-123. Cited 40 times.
-
- ☐ 34 Nadkarni, P.M., Ohno-Machado, L., Chapman, W.W.
Natural language processing: An introduction
 (2011) *Journal of the American Medical Informatics Association*, 18 (5), pp. 544-551. Cited 161 times.
<http://jamia.bmj.com/content/18/5/544.full.pdf>
 doi: 10.1136/amiajnl-2011-000464
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-
- ☐ 35 Piskorski, J., Yangarber, R.
Information extraction: Past, present and future
 (2013) *Multisource, Multilingual Information Extraction and Summarization. Theory and Applications of Natural Language Processing*, pp. 23-49. Cited 39 times.
 In Thierry Poibeau, Horacio Saggió, Jakub Piskorski, and Roman Yangarber, editors Springer Berlin Heidelberg
-
- ☐ 36 Yeh, H.-C., Yang, Y.-F., Wong, W.-K.
Interaction chain patterns of online text construction with lexical cohesion
 (2010) *Educational Technology and Society*, 13 (1), pp. 55-68. Cited 5 times.
http://www.ifets.info/journals/13_1/7.pdf
-

-
- ☐ 37 Meurers, D.
(2012) *Natural Language Processing and Language Learning. Encyclopedia of Applied Linguistics*. Cited 18 times.
edited by Carol A. Chapelle Wiley Blackwell
-
- ☐ 38 Soderland, S.
Learning information extraction rules for semi-structured and free text
(1999) *Machine Learning*, 34 (1), pp. 233-272. Cited 557 times.
[View at Publisher](#)
-
- ☐ 39 Feng, J., Zhou, Y., Martin, T.
Sentence similarity based on relevance
(2008) *The Information Processing and Management of Uncertainty in Knowledge-based System, IPMU '08, Torremolinos, Malaga*
June
-
- ☐ 40 Islam, A., Inkpen, D.
Semantic text similarity using corpus-based word similarity and string similarity
(2008) *ACM Transactions on Knowledge Discovery from Data*, 2 (2), p. 10. Cited 194 times.
-
- ☐ 41 Landauer, T.K., Laham, D., Rehder, B., Schreiner, M.E.
How well can passage meaning be derived without using word order? A comparison of Latent Semantic Analysis and humans
(1997) *19th Annual Meeting of the Cognitive Science Society Mawwah, NJ*. Cited 2 times.
August
-
- ☐ 42 Callear, D., Jerrams-Smith, J., Soh, V.
CAA of Short Non-MCQ Answer
(2001) *5th International CAA Conference*
organized by Loughborough University
-

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