

Metadata for Language Learning Resources: Advancing OLAC for Language Development

When the first Open Language Archive Community meetings were convened in 2001 [1-3], Language Documentation was a new research framework [4-5]. Language Description had been the long understood goal for the field of linguistics. However, as early as 1968 Fishman and others [6-9] suggested Language Development, inclusive of ideas now known as Language Revitalization [10-12] and Language Reclamation [13], was within scope of linguistic scholarly activities. Addressing language-learning needs within ethno-linguistic minority communities is increasingly the focus of scholarly pursuits—including the production of pedagogical materials [14-20]. However, describing language resources which have been crafted specifically with pedagogical goals in mind, or which conform to specific pedagogical frameworks remains a challenge. OLAC, depending on Dublin Core's foundation [21], only has limited options for describing learning resources [22-25]. We show that adding the LRMI (Learning Resource Metadata Initiative) schema [26], a lightweight learning resource metadata schema [27-28], to OLAC's current application profile, will increase the descriptive capabilities of archives and repositories which have an enduring focus on assets of interest to ethno-linguistic minorities. LRMI facilitates language development by allowing OLAC viewers to search for learning resources which may become inspirational for language development. Learning resource metadata also brings the utility of OLAC, and the potential to participate in relevant ways to new preservation organizations which have focused on language learning resources. We see two ways that LRMI could be integrated into the OLAC community: 1) add new vocabularies and terms in the OLAC name-space, or 2) add the LRMI namespace to the OLAC aggregator. We present work which includes an .xsd file containing controlled vocabularies within LRMI. This technological implementation of LRMI, when added to OLAC feeds, adds value to preservation institutions on top of already existing integrations between LRMI and schema.org [29].

References

- [1] Bird, Steven, and Gary Simons. 2000a. "White Paper on Establishing an Infrastructure for Open Language Archiving." [Presentation Slides]. Presented at the Workshop on Web-Based Language Documentation and Description, Philadelphia on 12-15 December 2000. <http://www.language-archives.org/events/talks/olac-white-paper.pdf>.
- [2] Bird, Steven, and Gary Simons. 2000b. "White Paper on Establishing an Infrastructure for Open Language Archiving." [Discussion Paper] Presented at the Workshop on Web-Based Language Documentation and Description, Philadelphia on 12-15 December 2000. <http://www.language-archives.org/documents/white-paper.html>.

- [3] Open Language Archives Community. Website and Standards.
<http://www.language-archives.org>
- [4] Himmelmann, Nikolaus P. 1998. "Documentary and Descriptive Linguistics." *Linguistics* 36 (1): 161–95. doi:[10.1515/ling.1998.36.1.161](https://doi.org/10.1515/ling.1998.36.1.161).
- [5] Himmelmann, Nikolaus P. 2006. "Language Documentation: What Is It and What Is It Good For?" In *Essentials of Language Documentation*, edited by Jost Gippert, Nikolaus P. Himmelmann, and Ulrike Mosel, 1–30. Trends in Linguistics. Studies and Monographs [TiLSM] 178. Berlin; New York: Mouton de Gruyter.
doi:[10.1515/9783110197730.1](https://doi.org/10.1515/9783110197730.1).
- [6] Ferguson, Charles A. 1968. "Language Development." In *Language Problems of Developing Nations*, edited by Joshua A. Fishman, Charles A. Ferguson, and J. Das Gupta, 27–36. New York: Wiley and Sons.
- [7] Fishman, Joshua A. 1968. "Language Problems and Types of Political and Socio-Cultural Integration: A Conceptual Postscript." In a report on the *Ninth International Conference on Second Language Problems*, (Tunis, 24–27 April). London, England: English-Teaching Information Centre.
<https://eric.ed.gov/?id=ED025739>.
- [8] Lewis, M. Paul, and Gary F. Simons. 2016. *Sustaining Language Use: Perspectives on Community-Based Language Development*. Dallas, Texas: SIL International.
- [9] Parks, Elziabeth, ed. 2016. "Special Issue: The Ethics of Language Development. 51 (1)." *Listening: Journal of Communication Ethics, Religion, and Culture*.
<http://www.listeningjournal.us>.
- [10] Gerdts, Donna B. 2017. "Indigenous Linguists: Bringing Research into Language Revitalization." *International Journal of American Linguistics* 83 (4): 607–17.
doi:[10.1086/693763](https://doi.org/10.1086/693763).
- [11] Rouvier, Ruth, Haley De Korne, George Ironstrack, Joanne Knapp-Philo, Alissa Baker-Oglesbee, Shobhana Chelliah, Jordyn Flaada, et al. 2017. *Child Language Research and Revitalization Working Group: Supporting Young Learners and Their Communities*. Waltham, MA: EDC.
<https://www.edc.org/sites/default/files/uploads/RouvierWhitePaperFinal.pdf>.
- [12] Shulist, Sarah. 2019. "Towards an Interdisciplinary Bridge between Documentation and Revitalization: Bringing Ethnographic Methods into Endangered-Language Projects and Programming." *Language Documentation* 13: 36–62.
<http://hdl.handle.net/10125/24798>.
- [13] Amery, Rob. 2016. "Language Reclamation." In *Warraparna Kurna!*, 19–40. Reclaiming an Australian Language. University of Adelaide Press.
<https://www.jstor.org/stable/10.20851/j.ctt1sq5wgq.11>.

- [14] Hill, Peter, and Elyssa Sierra Concha. 2021. "Living Legends: Adapting Centuries-Old Lakota Stories for Use in Contemporary Educational Settings." Video of presentation at the 7th International Conference on Language Documentation & Conservation, Online, University of Hawai'i. <https://youtu.be/xfAychzJkHQ>.
- [15] Jones, Mari C., and Sarah Ogilvie, eds. 2013. *Keeping Languages Alive: Documentation, Pedagogy and Revitalization*. Cambridge, UK; New York: Cambridge University Press.
- [16] Poetsch, Susan, Jarrett Michael, and Angelo Denise. 2019. "Learning and Teaching Gumbaynggirr through Story: Behind the Scenes of Professional Learning Workshops for Teachers of an Aboriginal Language." Audio recording of presentation at the 6th International Conference on Language Documentation and Conservation (ICLDC), University of Hawai'i at Mānoa, March 3. <http://hdl.handle.net/10125/44847>.
- [17] Richards, Mark, Caroline Jones, and Josephine Lardy. 2021. "Developing an App for Learning Mangarrayi." Video of presentation at the 7th International Conference on Language Documentation & Conservation, Online University of Hawai'i. <https://youtu.be/R31a52psKso>.
- [18] Tye, Swallow, David Underwood, and Bain Sophia. 2019. "QELOM,QEMSET TFE SENĆOFENS E TFE WUCÍSTENEK ŁTE (Strengthening the Language of Our Teachers): Ensuring the Continued Language Growth of Our L2 SENĆOFEN Teachers." Audio recording presented at the 6th International Conference on Language Documentation and Conservation (ICLDC), University of Hawai'i at Mānoa, March 3. <http://hdl.handle.net/10125/44762>.
- [19] Ulrich, Jan, Marek Kupiec, Elliot Thornton, Peter Vieira, and Logan Swango. 2021. "Empowering Under-Resourced Language Communities through Online Learning Platforms." Audio and video recordings presented at the 7th International Conference on Language Documentation and Conservation (ICLDC), University of Hawai'i at Mānoa, March 4. <http://hdl.handle.net/10125/74459>.
- [20] Weber, Diana Dahlin, Diane Wroge, and Joan Bomberger Yoder. 2007. "Writers' Workshops: A Strategy for Developing Indigenous Writers." *Language Documentation & Conservation* 1: 77–93. <http://hdl.handle.net/10125/1728>.
- [21] Bird, Steven, and Gary F. Simons. 2004. "Building an Open Language Archives Community on the DC Foundation." In *Metadata in Practice*, edited by Diane Hillmann and Elaine L. Westbrook. Chicago: American Library Association.
- [22] Barker, Phil, and Lorna M. Campbell. 2010. "Metadata for Learning Materials: An Overview of Existing Standards and Current Developments." *Technology, Instruction, Cognition and Learning* 7 (3–4): 225–43.
- [23] Carmichael, Patrick. 2002. "Learning How to Learn: Using the Dublin Core Metadata Element Set to Support Teachers as Researchers." In *DC-2002 -- Italy Proceedings of*

- the International Conference on Dublin Core and Metadata for E-Communities*, 201–3. Florence Italy: Firenze University Press. doi:[10.26530/OAPEN_345123](https://doi.org/10.26530/OAPEN_345123).
- [24] Slavic, Aida, and Clara Baiget. 2001. “Using Dublin Core in Educational Material: Some Practical Considerations Based on the EASEL Experience.” *VINE* 31 (4). MCB UP Ltd: 74–85. doi:[10.1108/03055720010804339](https://doi.org/10.1108/03055720010804339).
- [25] Sutton, Stuart A., and Jon Mason. 2001. “The Dublin Core and Metadata for Educational Resources.” In *DC-2001--Tokyo Proceedings of International Conference on Dublin Core and Metadata Applications 2001*, 25–31. October 24-26, 2001, NII, Tokyo, Japan: National Institute of Informatics.
<https://dcpapers.dublincore.org/pubs/article/view/645>.
- [26] Learning Resource Metadata Initiative.
https://www.dublincore.org/specifications/lrmi/lrmi_terms/2020-11-12
- [27] Barker, Phil, and Lorna M. Campbell. 2015. “LRMI, Learning Resource Metadata on the Web.” In *Proceedings of the 24th International Conference on World Wide Web*, 687. WWW '15 Companion. New York, NY, USA: Association for Computing Machinery. doi:[10.1145/2740908.2741745](https://doi.org/10.1145/2740908.2741745).
- [28] Campbell, Lorna M, and Phil Barker. 2014. “LRMI Implementation: Overview, Issues and Experiences.” Lancaster, England: CETIS (Centre for Educational Technology, Interoperability and Standards).
<https://blogs.pjtk.net/phil/content/uploads/lrmiimplementationSynthesis.pdf>.
- [29] Barker, Phil, Lorna M. Campbell, and Richard Wallis. 2016. “Current Work of the Learning Resource Metadata Initiative, Building on Schema.Org to Describe Learning Resources.” *Special Session at DC-2016, Copenhagen, Denmark*. Copenhagen, Denmark. <https://dcevents.dublincore.org/IntConf/dc-2016/paper/view/432.html>.