

CURRICULUM VITAE
for
Stuart J. McLAREN

Full Name: Stuart Joseph McLAREN (PhD)

PRESENT POSITION :

Adj Senior Lecturer in Environmental Health,
School of Health Sciences, College of Health
Massey University, Wellington.

ACADEMIC QUALIFICATIONS:

PhD (Environmental Health) (2008)
MSc (Hons) (Chemistry)
New Zealand Certificate in Science (Chemistry)
New Zealand Diploma in Science (Chemistry)
Royal Society of Health Diploma for Public Health Inspectors
Japanese language papers to BA level (COP)
Japanese Proficiency Examination Stage 3
Advanced Teaching Certificate in Tertiary Teaching

PROFESSIONAL POSITIONS HELD:

1997-2018	Senior Lecturer in Environmental Health: Massey University (completed PhD at this time)
1994-1997	National Adviser Science , Ministry of Health
1991-1994	Health Protection Officer, Health Waikato (now Waikato District Health Board) (completed MSc at this time) Completed MSc in this period
1988-1991	Honorary Research Fellow, Hirota Laboratory, Yokohama National University
1988-1991	Lecturer , Bunkyo University, Chigasaki Campus, Tokyo.
1978-1988	Environmental Health Officer, City of Auckland
1973-1978	Industrial Chemist- Dulux New Zealand

PRESENT RESEARCH/PROFESSIONAL SPECIALITIES:

- Efficacy of soundfield systems in school classrooms
- Noise in Early Education and Learning Environments.
- Occupational noise assessment and noise induced hearing loss
- Noise producing consumer products
- Environmental noise assessment

- The effects of noise on children in general and on those with special needs
- Chlorination disinfection by-products (DBPs) with particular reference to public swimming and bathing facilities.
- Arsenic cycle and speciation of Arsenic in the Waikato River.
- Toxic constituents in drinking water supplies.

SKILLS AND EXPERIENCE

1 Noise

Noise in early childhood education centres and effects on the children and their teachers

- Acoustical quality of classroom and learning spaces especially the modern learning (open plan) environments
- Effects of noise on children especially those with special needs eg Hearing impairment and those with sensory processing problems (autism and giftedness)
- Completed study on efficacy of soundfield systems in classrooms
- Recommended noise provisions for the Criteria for the Licensing and Certification of Early Childhood Services
- Development of templates for Noise Management Plans in early childhood setting
- Occupational noise legislation, standards measurement and assessment including dosimetry and simple hearing testing
- Environmental noise legislation, standards, measurement and assessment.
- Effects of noise in learning environmental such as childcare centres especially for children with special education needs who are severely affected by noise

Water and Waste Treatment

- Arsenic Cycle in the Waikato River and toxic constituents in City Water Supplies.
Sewage Treatment - working party to develop Wetland System of Sewage Treatment for Ruapehu District.
- Chemistry and physical processes in the treatment of drinking water and that of public bathing facilities.
- Chlorination disinfection by-products in water supplies and swimming pools
- Legislation standards and chemical treatment processes in drinking water and public swimming pools
- Public Health risk assessment in water treatment and sewage disposal
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Professional duties

Post graduate supervision for thesis and post graduate courses

Major under graduate teaching and/or course coordination

- Water and Wastes Treatment (214 314),
- Biophysical effects Noise Vibration and EMR 214 316
- Introduction to Environmental Health and Housing (214 110)

- Environmental Health (214317)
- Environmental Health Risk Management for disasters (214 301)
Minor contributions to academic courses 231 105, 214 216 and 251 272.
- Academic programmes committee member

LIST OF PUBLICATIONS and CURRENT AFFAIRS MEDIA

1. McLaren, S., Page, W. *Accessibility or bamboozlement? The case for clarity in modern legislation.* The Clarity Journal, (78), November 2018.
2. Feature Article in NZ Listener, *Look and Learn.* 23 June 2008
3. Radio New Zealand National - Morning Report *Havelock North Water Crisis.* 5 June 2018.
4. Radio New Zealand National- Our Changing World. *Noise and Young Years.* 9 June 2017.
5. Hannah, L Page, W. H. McLaren, S. J. *A review of AS/NZS 2107:2016 Acoustics - recommended design sound levels and reverberations times for building Interiors.* New Zealand Acoustics Journal 2017 (30) 4.
6. McLaren, S., Beech K. *Evaluation of occupational noise levels on the Wellington Suburban Trans Metro Rail Service.* New Zealand Acoustics 2017 29(2):12-20 (8 pages)
7. McLaren, S., Satherley E. *Evaluation of occupational noise levels of an enclosed workshop at KiwiRail.* New Zealand Acoustics 2016 29(2):24-31.
8. McLaren, S., Page, W. *Evaluation of the Palmerston North KiwiRail workshops for occupational noise levels and personal sound exposure.* Funded client study-technical report for KiwiRail June 2015.
9. Laird I, McBride D, McLaren SJ, Gardner D, Hislop R, Gray J, Legg S, Page W., *Noise sources, exposures and controls in small enterprises in New Zealand.* New Zealand Acoustics 2016 29(1):28-38).
10. McLaren S, Page W. *Common failings of interdisciplinary studies on noise and the potential solutions* New Zealand Acoustics 2016 29(2):4-10 (7 pages)
11. McLaren, S Page, W. *Noise and the implications for children with autism spectrum disorder in mainstream education.* Austin J Neurological Disorders and Epilepsy 2015 (1):02-06 .
12. Page, W. Hannah L, McLaren S. *Tools of the trade: A review of New Zealand acoustic standards 1977 to 2010* Journal of Acoustical Society of New Zealand 2015 27(1):14-29 (12 pages).

13. Laird, I, McLaren, S., McBride, D., Legg, S., Dickinson, P., & Gardner, D. (2013). *Effective strategies in the prevention of noise -induced hearing loss*. In *Injury Prevention* Vol. 18 (pp. A13). London, UK: British Medical Journal
14. McLaren, S. Parker L (2012). Evaluation of noise producing toys and the product standard criteria. In *Injury Prevention* Vol. 18 (pp. A126). London, UK: British Medical Journal
15. McLaren, S. *Is inclusive education right for every child A account of by the parent of a child with high and complex needs due to Autism spectrum disorder*. Kairaranga (reviewed education journal) 2013, 14 1.
16. McLaren, S, Page, W. Parker, L. Noise Producing Toys and the Efficacy of Product Standard Criteria to Protect Health and Education Outcomes *Int. J. Environ. Res. Public Health* 2013, 10.
17. McLaren S, Page, W. Noise in inclusive learning environments (Chapter 12) in *INCLUSIVE EDUCATION Perspectives in Professional Practice*, Dunmore, March 2013.
18. McLaren, S., Page, W. Parker *Evaluation of noise producing toys and the product standard criteria* *Injury prevention BMJ* , October 2012 Vol 18 Suppl 1.
19. Laird, I. McBride, D, Legg, S., Dickinson, P., McLaren, S., Gardner, D. effective strategies in the prevention of noise induced hearing loss. *BMJ* , October 2012 Vol 18 Suppl 1.
20. McLaren, S, Humphries S.: *A pilot study of a sound field system and acoustical quality in a New Zealand primary school classroom*. *New Zealand Journal of Educational studies* 2009. 44-1.
21. McLaren, S and Dickinson, P. The Hearing Status and Exposure to Noise of Early Childhood Centre Staff, *New Zealand Research in Early Childhood Education*.
22. Rickson, D., McLaren, S., Jones, L., "A kind of serenity washing over the centre" Perceptions of staff and trained observers regarding the use of background music to improve the auditory environment in early childhood settings. *New Zealand Research in Early Childhood Education*, 2007. 10: p. 81-94.
23. McLaren, S., *Noise provisions and at-risk children in New Zealand early childhood centres*. *Environmental Health*, 2007. 7(1): p. 60-70.
24. McLaren, S., Dickinson, P, *Noise in early childhood centres and effects on the children and their teachers*. *Early Childhood Folio*, 2003. 7.
25. McLaren, S., Dickinson, P, *Noise in early childhood centres and how safe is the level of noise*. *New Zealand Research in Early Childhood Education*, 2005. 8: p. 71-79.

26. McLaren, S., *Noise and at-risk children in early childhood education centres*. Early Childhood Folio, 2005. 9: p. 39-43.
27. McLaren, S., Coleman, M., Weinstein, P., Harding, D., *The potential health effects of pool chemicals and disinfection by-products*. Environmental Health, 2001. 1(3): p. 65-72.
28. McLaren S, Kim N, *Evidence of a seasonal fluctuation of arsenic in New Zealand longest river and the effect of treatment on concentrations in drinking-water*. Environmental Pollution 1995: 90 (1) p67-73

Project completed and submitted November 2018 to journal for publication.

The Drinking Water Crises of Flint and Havelock North – Flagrant disregard of public health - A comparative study.

Stuart McLaren and Wyatt Page : Massey University Wellington

Suzanne Selig and Michelle Sahi: University of Michigan –Flint

CONFERENCE DELIVERIES and PAPERS PUBLISHED IN PROCEEDINGS

1. McLaren, S.J. Selig, S, Sahli, M., Page, W (2018). *Water crises of Flint and Havelock North Flagrant disregard of public health* 15th World Congress of Environmental Health Sky City 20-23 March 2018 Sky City Auckland.
2. McLaren, S (2017) Noise in early education, Wellington Audiologist Journal Club, 9 June, 2007, Kenepuru Hospital seminar room.
3. McLaren, S. J., & Page. (2016). Noise in early education, at-risk children and practical solutions to mitigate noise. In *only in hard copy* (pp. 8-9). Auckland: NZTC.
4. McLaren, S. J. (2014). Swallowing hazards of the modern age. In <http://www.tracenz.net/conferences.html> (pp. 23). Wellington: New Zealand Trace Elements Group.
5. McLaren, S. *Is inclusive education right for every child* Special Guest Speaker - Conference for the Parents of the Vision Impaired, 21-22 September 2013, Bella Vista Hotel, Auckland.
6. McLaren, S. J. (2013). *Is Inclusive Education Right for Every Child? A case study of a child with high and complex needs due to autism spectrum disorder*. Palmerston North: Institute of Education - Massey University.
7. McLaren, S. J., & Page, W. H. (2014). Common failings of inter-disciplinary studies on noise and the potential solutions. In *INTERNOISE 2014 - 43rd International*

Congress on Noise Control Engineering: Improving the World Through Noise Control.

8. Page, W., & McLaren, S. (2014). New Zealand code of practice for retail fireworks - Revision of the noise testing provisions: Experiences and findings. In *INTERNOISE 2014 - 43rd International Congress on Noise Control Engineering: Improving the World Through Noise Control*.
9. McLaren, S., Page, W. Parker, L. Sivaraj, S, *Evaluation of noise producing toys and product standard criteria.*
10. McLaren, S., Page, W., Dickinson, P., Sivaraj, S. *Acoustics and noise management in New Zealand early education Environments.*
11. Sivraj, S., Siviraj, A., Page, W. Dickinson, P, McLaren, S *Longitudinal analysis of hearing loss development in orchestral musicians with increased years of music exposure.*
12. Sivraj, S., Siviraj, A., Page, W. Dickinson, P, McLaren, S **Influence of individual susceptibility to music induced hearing loss in orchestral musicians (above 9-12) presented at Euronoise Conference 10-13 June 2012, Prague.**
13. McLaren, S. A pilot study on the acoustic environment in early childhood centres, and the hearing status and exposure to noise of early childhood centre staff. Proceedings of the International Symposium on Sustainability in Acoustics, ISSA 2010 29-31 August 2010, Auckland.
14. McLaren, S. Implementing a plan to support and educate severely disabled students on campus particularly those who show savant or extraordinary abilities. VC symposium, 13 November 2008 Massey University, Wellington.
15. McLaren S. Kearney A Coming Ready Or Not: Are New Zealand Tertiary Institutions Ready for those with significant impairments? *Conference: Making inclusive Education Happen Sept. 28-30, 2009, Te Papa, Wellington.*
16. McLaren S. J. *Noise provisions in early childhood settings and children at risk.* New Zealand Institute of Environmental Health Conference 21-23 May 2008 Auckland. (Invited presentation).
17. McLaren, S. *Noise in New Zealand early childhood centres (preschools) - a special problems for autistic children* Third Online World Conference hosted by Autism CYMRU of Wales on <http://www.awares.org /conferences> 26 November 2007 – 20 December 2007.
18. McLaren, S. *Noise in early education. A special problem for autistic children.* in *A different way of thinking. Conference of Autism New Zealand Inc.* 2006. Wellington: Autism New Zealand Inc.

19. McLaren, S., Rickson, D, Jones, L., Dickinson, P., *Noise provisions in New Zealand early childhood education centres and a comparison of sound pressure levels with perceived noise assessed by trained observers.* in *Internoise 2006. The 35th International Congress and Exposition on Noise Control Engineering.* The International Institute of Noise Control Engineering.
20. McLaren, S., *Sounds of and by children,* Active Movement Symposium 2006, SPARC Te Papa, Wellington, April 2006.
21. McLaren, S., and Dickinson, P.,. *Children's sound exposure.* in *Internoise, 2005, The 34th International Congress and Exposition on Noise Control Engineering.* 2005. Rio de Janeiro: International Institute of Noise Control Engineering.
22. McLaren, S., Dickinson, P.,. *Noise in early childhood centres and its effects on staff and children.* in *Internoise 2004, The 33rd International Congress and Exposition on Noise Control Engineering.* 2004. Prague: The International Institute of Noise Control Engineering.
23. McLaren, S., Dickinson, P.,. *Noise in early educational facilities and impacts on the children and teaching staff.* in *Internoise 2002, The 2002 International Congress and Exposition on Noise Control Engineering.* 2002. Dearborn, MI, USA.: International Institute of Noise Control Engineering.
24. McLaren, S., Coleman, M., Weinstein, P., Harding, D., *Nasties in swimming pools - The potential Health effects of chemicals and disinfection by-products.* New Zealand Environmental Health Conference, Massey University, Wellington, 9-10 July 2001.
25. McLaren S. *Noise in Early Education and Child Development* Disability Research Awareness Day, Massey University, Palmerston North, April 2001
26. McLaren, S. Kim, N. *Concentrations of arsenic in Hamilton drinking water : the effect of treatment , and evidence for a seasonal fluctuation of arsenic concentrations in the lower Waikato river.* Symposia Proceedings, New Zealand Water and Wastes Association, University of Waikato, 31 August 1994.
27. McLaren, S. Kim, N. *Effects of the reticulation system on the overall concentrations of chemical constituents in the Hamilton city water suppl.* Conference proceedings New Zealand Water and Wastes Annual Conference
28. McLaren, S. Herd, A.. *Air and dust lead levels in Auckland City.* Conference proceedings - Lead in the New Zealand Environment, Auckland University August 1988

RESEARCH GRANTS

Disinfection by-products in swimming pools. Wellington Partnership Research Fund Wellington Polytechnic, 1999.

CV Short, S. J. McLaren

Develop technology using an acoustic test to determine mouldy core in Fuji brand applies. TBG grant 2001

Use of music to improve the acoustic environment in early childhood centres. Wellington strategic research fund, Massey University 2004

Efficacy of sound field Systems in school classrooms. Robertson Road School and Mangere/Papatoetoe Education Trust. 2007