Curriculum Vitae

Professor David Brian Lowe

B.E (UTS, Hons, Medal), PhD (UTS), SMACM, SMIEEE, PFHEA

Professor of Software Engineering;
Faculty of Engineering, The University of Sydney

Chair of the Board
Grok Academy Limited

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Brief Biography

I am currently Professor of Software Engineering in the Faculty of Engineering at The University of Sydney.

I have active research interests in the areas of remote access technologies, professional engineering. and computing education. In particular, I focus on real-time control of educational laboratory systems in the web environment, including being a world leader in research into the use and design of remote laboratories. I have published more than 200 peer-reviewed papers and three textbooks. I have served on many conference committees and journal editorial boards and undertaken numerous consultancies related to software evaluation, Web development (especially project planning and evaluation) and Web technologies.

A key focus of recent activities has been on utilising remote laboratories to support shared access to lab facilities. I led the Labshare project – a national initiative involving 5 core Universities and numerous other institutions, supporting shared access to laboratory facilities. I was the inaugural CEO of The LabShare Institute (a not-for-profit company established to support sharing of teaching laboratory infrastructure) and the President of the Global Online Laboratory Consortium (an international association focused on research and utilisation of teaching laboratories), and was previously the inaugural vice-president of the International Society for Web Engineering. I also have active interests in both engineering and computing education. I am the current chair of the Board for Grok Academy Ltd, a not-for-profit company focused on supporting computing education generally and capabilities related to the Digital Technologies stream of the Australian curriculum in particular.

I have an outstanding teaching record, including teaching and course development in software engineering, engineering design, Web technologies and real-time systems. I have served as a Higher Education Generalist on DET Assessment panels, and have been a panellist and chair of Engineering course accreditation panels across Australia, Malaysia, Singapore, NZ and Fiji. From 2012 to 2017 I was a member of the Australian Council of Engineering Deans (ACED) executive and convenor of the Engineering Associate Deans network – a subcommittee of ACED. In 2019 I received the AAEE national award for Excellence in Engineering Education.

Prior to my appointment at the University of Sydney I was Director of the Centre for Real-Time Information Networks (CRIN) - a designated Research Strength at the University of Technology, Sydney focused on blending embedded systems and telecommunications in addressing real-world problems. I also spent 6 years (2002-2008) as the Associate Dean (T&L) for the Faculty of Engineering, UTS.

Qualifications and Employment History

Degrees and Qualifications

Doctor of Philosophy: (Image Representation via Information Decomposition)
University of Technology, Sydney. Jan 1990 - Dec 1992
(and Cambridge University, U.K. Apr 1991 - Apr 1992 as an invited Visiting Scholar)

Graduate Certificate in Higher Education: 1994, University of Technology, Sydney

Bachelor of Engineering: 1984-1989: UTS, First Class Honours. University Medal
Subject results: 0 Fails, 0 Passes, 0 Credits, 8 Distinctions, 28 High Distinctions.

Employment History / Positions held

University of Sydney (2012-present)
Professor of Software Engineering (2012-present)
Deputy Dean and Associate Dean (Education), Faculty of Engineering (2012-2019)
Executive Director, Australian Computing Academy (2017-2020)

University of Technology Sydney (1989, 1993-2012)
Director, Centre for Real-Time Information Networks (2008-2012)
Associate Dean (T&L) (2002-2008)
Director of Undergraduate Programs (2000-2002)
Head, Computer Systems Engineering (1998-2000)

Lecturer, Senior Lecturer, Associate Professor, Professor (1993 - 2012)
Full-time Senior Tutor (1989): Lecturing and Subject Co-ordinator
Part-Time Tutor (1987-1989): Tutoring, marking, demonstrating

I contributed in numerous roles over an extended period at UTS, including a continuing development into stronger leadership positions, and with increasing impacts on the broader University community.

Create-Net International Research Centre (2009), Trento, Italy – Senior Researcher

I spent a sabbatical based at Create-Net in Italy – a leading international ICT research centre. This was partly to reinvigorate my personal research profile after an extended period as A/Dean at UTS, but also to investigate approaches to innovative industry-linked research. I also spent periods visiting other leading institutions, including an extended period at MIT.

University of Southampton (1996), UK – Senior Research Fellow

This period was spent establishing my early research career, and my professional and international linkages. I visited numerous European research centres, and completed my first major textbook.

Cambridge University (1991-1992), UK – Visiting Scholar

I spent a significant component of my PhD at Cambridge. Apart from focusing on my personal research, this period also gave me an early-career understanding of research and teaching excellence, and the importance of multi-disciplinarity (expressed through the college system).

C.S.R. Limited (January, 1984 to June, 1989)

Electrical Engineer: Employed primarily in sugar mills (Mackay and Ingham), coal-mines (Hunter Valley), and building products factories (Sydney, Tumut). The work involved a large variety of engineering skills and projects; drafting, equipment commissioning, supervision and liaison with contractors, tendering etc.

Management and Leadership

I have extensive leadership and management experience within the higher education sector. This has included roles that have been both operational and strategic, have involved substantial staff supervision and management of HR issues, and included significant budget accountability.

I am passionate about using student learning as a vehicle for providing every student the opportunity to maximise their potential. I have sought out educational roles in which I can make a difference to student learning – at individual, Faculty, Institutional, and national levels, and most recently internationally. These roles have included my own academic teaching and scholarship as well as numerous formal roles. A common theme across all my roles has been balancing pedagogic and practical considerations whilst retaining a clear focus on the quality of the student experience and outcomes. My work is characterised by strong leadership and vision, a deep passion and integrity, and a commitment to continuing to learn and enhance my capabilities whilst working within an increasingly complex higher education environment.

Roles:
- Executive Director, Australian Computing Academy, The University of Sydney (2017-2020)
- Deputy Dean and Associate Dean (Education), Faculty of Engineering and IT, The University of Sydney (2012-2019)
- Associate Dean (Teaching and Learning), Faculty of Engineering, UTS (2002-2008)
- Director of Undergraduate Programs, Faculty of Engineering, UTS (2000-2002)
- Head, Computer Systems Engineering (CSE), UTS 1998-2000

Illustrative achievements:

- As the University of Sydney Faculty of Engineering Associate Dean (Education) I led a series of program initiatives that resulted in the growth of the student load from ~3500 to ~7000 EFTSL (and student income from $83million in 2012 to an estimated $245million in 2019), coupled with significant quality and diversity improvements: the median CSP commencing ATAR having risen from 90.6 to >95 in 2018; a significant increase in high achievers with the proportion of 98+ ATAR commencing students having risen from 15% to 28%; female BE commencers having risen from 23.8% to 31.2%; and significant improvements in student feedback (USS) results.
- As the UTS Associate Dean (T&L) I led a team of around 20 program heads, course coordinators, and the Directors of Undergraduate and Postgraduate Programs, and had accountability for ensuring the delivery of a complex suite of coursework programs: 15 undergraduate courses with 9 majors for more than 2000 EFTSL, and 11 postgraduate courses with 12 majors for approximately 500 EFTSL. This included management of a casual teaching budget of over $1m, and coordinating the teaching responsibilities of approximately 80 academic staff within a complex matrix organisational structure.

Professional Associations and Community Activities

I have made, and continue to make, extensive contributions to my professional community. I have been on numerous conference program committees (16 in the last 10 years) and undertaken extensive reviewing of journal and conference papers, and grant applications. I have played a key role in a number of journals, including as the Editor-in-Chief of the ICST *Transactions on the Real-World Web*, and as Managing Editor of the *Journal of Web Engineering*. I have undertaken considerable consulting work, including as an expert witness in numerous criminal and civil court cases. I have been a panel member and chair on

numerous Engineers Australia accreditation panels and Department of Education Assessment panels.

Illustrative achievements:

- Board Chair, *Grok Academy Ltd* (2020-present)
- Independent Chair, Academic Board, *Australian Institute of Technology and Commerce* (2019-present)
- Independent Chair, Academic Board, *Sydney Polytechnic Institute* (2020-present)
- Board Member and Chief Executive, *The Labshare Institute (2012-2016)*
- Principal Fellow, Higher Education Academy
- Senior Member IEEE, Senior Member of the ACM, Member of Australasian Association for Engineering Education,
- Editor-in-Chief, *ICST Transaction on the Real-World Web (2009-2014)*
- Editorial Board: *International Journal of Online Engineering* (2009-2015)
- Managing Editor: *Journal of Web Engineering (2007-2011)*
- Theme editor and member, Editorial Board , *Journal of Digital Information (2001-2006)*
- Editorial board: *International Journal of Web Engineering and Technologies (2003-2007)*
- Conference General Chair, REV2013: 10th Remote Engineering and Visualisation Conf.
- Vice-Chair (Web Engineering), WWW2006: 15th International World Wide Web Conference
- Program Chair, ICWE2005: 5th International Conference on Web Engineering
- Member, Engineers Australia - Engineering Technologist Accreditation Working Party
- I have also undertaken numerous expert witness and professional service consultancies. Examples include:
  - Expert witness work on image analysis in several criminal trials.
  - Consulting on evaluation of Web system technologies
  - Software auditing for commercial realtime software project.
  - Expert witness work on multimedia software system compatibility.
  - Development of a software specification for an open systems display manager, audit and review of the development of a large scale complex software system.
  - Investigation of distance measurements from photographs taken of an accident scene
  - Development of imaging system for wire surface coating thickness measurement.

Consulting

I have undertaken numerous expert witness and professional service consultancies. Examples include:

- Expert witness work on image analysis in several criminal trials.
- Consulting on evaluation of Web system technologies
- Software auditing for commercial realtime software project.
- Expert witness work on multimedia software system compatibility.
- Development of a software specification for an open systems display manager.
- Investigation of distance measurements from photographs taken of an accident scene
- Development of imaging system for wire surface coating thickness measurement.

Personal:

I have also made significant contributions to my local community, including:

- Football Federation Australia Level 3 Football Referee (2011-2020)
- Volunteer, St. Vincent de Paul Society, Pymble (2015-2020)

- Chair, Pymble Parish Pastoral Council (2011-2016)
- President, Sacred Heart Pymble Football Club (2010-2011)
- Member, Sacred Heart Pymble School P&F Executive (2010-2011)

Research, Scholarship and Advancement of Knowledge

My research is split between engineering education (and particularly the nature of professional practice) and remote monitoring and control of real-time systems. I am a world leader in the development and utilisation of remotely accessed laboratory facilities, with a key focus on technical system architectures. I have substantial grant funding and research student supervision and publishing records.

Illustrative achievements:

- Co-author of book: *Web Engineering: A Practitioner's Approach,* Pressman, R and Lowe D, McGraw-Hill, 2008
- Co-author of book: *XPath, XLink, XPointer, and XML*, Wilde and Lowe, Addison-Wesley, 2002
- Lead author of book: *Hypermedia and the Web: An Engineering Approach*, Lowe and Hall, Wiley, 1999
- Over 180 refereed publications.
- In last 12 years supervised 10 research students to completion.

Publications:

See list at end of CV

Grants over last 15 years: (~$15.1million in last 10 years)

2016-2020: $10million: NISA: Australian Computing Academy: supporting the Digital Technologies curriculum

2014-2017: $1.9million: AMSPP: Advancing Science & Engineering through Lab Learning

2013-2014: $219,000: OLT, Driving curriculum and technological change to support writing…

2011-2012: $216,000: ALTC Innov&Dev Grant, Enhancing remote lab learning through lesson plan integration

2011-2013: $220,000: ALTC Innov&Dev Grant, Using online self-assessments to manage diversity…

2009-2011: $2,100,000: *DEEWR DSA Fund*, Labshare: National Support for Laboratory Resource Sharing [Project Lead]

2009: $24,000, *UTS Partnership*, Feasibility of using localised mobile phone identification for traffic tracking [Lead CI]

2008-2009: $220,000: *ALTC Priority*, Enriching Student Learning Experiences through International Collaboration [CI]

2008-2009: $182,000: *ALTC Priority*, Embedding peer review of L&T in e-learning and blended learning environments [CI]

2007-2008: $97,488: *Carrick Competitive Grants*, Remotely Accessible Laboratories - Enhancing Learning Outcomes [Lead CI]

2005-2007: $310,000: *ARC Discovery*, Supporting co-evolution of business processes and Web systems, [Lead CI]

2004-2006: $24,000: *ARC International Linkage*, Managing Knowledge in Web-Driven Organisational Evolution [Lead CI]

2002-2004: $420,000: *ARC Discovery,* "Design-Driven Requirements Eng." [Lead CI]

1999-2001: $223,000: *ARC SPIRT*, "Scoping of interactive media projects", [Lead CI]

Teaching and Educational Development

I have been involved in teaching for ~30 years, having taught across areas as diverse as control systems, introductory electrical engineering, engineering design, risk engineering, programming, software design, computer systems analysis, web technologies, and many others. I was primarily responsible for the complete redesign of the software components of the Software Engineering, Electrical Engineering, and Computer Systems Engineering undergraduate programs at UTS, and more recently have driven major fundamental redesigns of the engineering and computing programs at The University of Sydney. I have developed numerous subjects. I have been involved in teaching at all levels including undergraduate, postgraduate, and continuing professional education, and co-developed and was Program Director for the innovative Information Systems Engineering graduate programs. I was responsible for setting up the professional education program on Object Technology as part of COTAR, and co-developed the joint UTS-Thomson Masters program in Software Engineering.

Awards

- AAEE 2019 National Award for Engineering Education Excellence
  From the AAEE description of the award: "*Awarded for demonstrated excellence in Engineering Education, which may include curriculum design, student support, peer support, or other significant initiatives with enduring positive impact. This award is intended to recognise significant and sustained contributions to Australasian Engineering Education at a multi-institutional or sector-wide level*".

- AAEE 2018 Award of Engineering Education Engagement (with Anthony Kadi)
  From the AAEE description of the award: "*Awarded for fostering an excellent standard of purposeful and successful engagement with multiple stakeholders in Australasian Engineering Education, such as colleagues, industry, and students. The award recognises a collegiate approach to quality learning and teaching practice and/or research and a sharing of educational expertise across multiple contexts*".

- AAEE 2002 McGraw-Hill New Engineering Educator Award
  From the AAEE description of the award: "*This [annual] award is given to an individual who has demonstrated that they have outstanding ability and potential. … The recipient will have a record of achievement that demonstrates their commitment, enthusiasm, creativity, technical proficiency, and skill in the art of engineering education.*"

Finalist, 2011 Engineers Australia Engineering Excellence Awards, for the *Labshare* project

AusWeb'2000 Paul Thistlewaite award for best paper:
  Lowe, D., (2000) "Improving Web Search Relevance: Using Navigational Structures to Provide a Search Context". *in AusWeb2K* (Cairns, Aust.), Southern Cross University Press, 194-209.

ARC Postgraduate Research Award (1990-1992)
OTC Telecommunications Student Award (1990)
  valued at $30,000, and awarded to outstanding post-graduate research students annually.

Publication List

Books

1. Pressman, R and Lowe D (2008) *Web Engineering: A Practitioner's Approach*, McGraw-Hill
   [This text has been used as a textbook for numerous courses on Web design and software engineering in the U.S. and Europe]
2. Wilde, E., & Lowe, D. (2003). *XPath, XLink, XPointer, and XML: A Practical Guide to Web Hyperlinking and Transclusion*. Boston, USA: Addison-Wesley.
3. Lowe D and Hall W (1998) *Hypermedia and the Web: An Engineering Approach*, Wiley, 1998, ISBN: 0-471-98312-8
   [This book was described by a reviewer as follows: "A fantasic overview of current leading-edge web engineering. As an in-depth view on current academic thinking on hypermedia, and how to use it on the web, this book is first class. Written by two leading thinkers in the field, … this is also a required read for any professional involved in large web products."]

Book Chapters

1. Gomez, K. M., Miorandi, D., & Lowe, D. (2011). Data Highways : An Activator–Inhibitor–based Approach for Autonomic Data Dissemination in Ad Hoc Wireless Networks. In P. Lio & D. Verma (Eds.), *Bio Inspired Networking and Sensing* (pp. 223-241). Hershey, PA, USA: IGI Global..
2. Lowe, David, Conlon, S., Murray, Steve, Weber, L., Villefromoy, M. D. L., Lindsay, E., Nafalski, Andrew, et al. (2011). LabShare: Towards Cross-Institutional Laboratory Sharing. In A. Azad, Michael Auer, & J. Harward (Eds.), *Internet-Based Remote Laboratories,* IGI Global.
3. Lowe, D. (2003) Emergent Knowledge in Web Development. in Aurum, A., Jeffery, R., C.Wohlin and M.Handzic eds. *Managing Software Engineering Knowledge*, Springer Verlag, Berlin, Germany, 2003, 157-176.
4. Lowe, D. and Henderson-Sellers, B. (2003) Characterising Web Systems: Merging Information and Functional Architectures. in Murthy, V.K. and Shi, N. eds. *Architectural Issues of Web-Enabled Electronic Business*, Idea Group Publishing, Hershey, PA, USA.
5. Lowe, D., Henderson-Sellers, B., & Gu, A. (2002). Web extensions to UML: Using the MVC Triad, *LNCS 2503* (Vol. 2503): Springer Verlag.
6. Lowe, D. (2001). A Framework for Defining Acceptance Criteria for Web Development Projects. In S. Murugesan & Y. Deshpande (Eds.), *Web Engineering: Managing Diversity and Complexity of Web Application Development* (Vol. 2016, pp. 279-294): Springer-Verlag.

Refereed Journal Articles (20 most recent only)

1. Lowe, D., & Kadi, A. (2021). Are student reflections on professional engagement activities correlated to academic performance? *Higher Education Research & Development*, 1–15. https://doi.org/10.1080/07294360.2021.1962811
2. Lowe, D. B., & Goldfinch, T. (2021). Lessons From an Analysis of the Intended Learning Outcomes of Integrative Project Units Within Engineering Programs. *IEEE Transactions on Education*, 1–6. https://doi.org/10.1109/TE.2021.3057622
3. Lowe, D., Wilkinson, T., Willey, K., Kadi, A., Goldfinch, T., & Lim, T. J. (2021). Educating the Evolving Engineer: Lessons From the University of Sydney. *IEEE Potentials*, *40*(2), 7–12. https://doi.org/10.1109/MPOT.2020.3043583
4. Lowe, D., Goldfinch, T., Kadi, A., Willey, K., & Wilkinson, T. (2021). Engineering graduates professional formation: the connection between activity types and professional competencies. *European Journal of Engineering Education*, 1–22. https://doi.org/10.1080/03043797.2021.1901074
5. Lowe, D., Yeung, H., Tawfik, M., Sancristobal, E., Castro, M., Orduna, P., Richter, T. (2016). Interoperating remote laboratory management systems (RLMSs) for more efficient sharing of laboratory resources. *Computer Standards & Interfaces*, 43, 21-29.
6. Lowe, D., Dang, B., Daniel, K., Murray, S., Lindsay, E. (2015). On the viability of supporting institutional sharing of remote laboratory facilities. *European Journal of Engineering Education*, 40(6), 611-622.

7. Tawfik, M., Salzmann, C., Gillet, D., Lowe, D., Saliah-Hassane, H., Sancristobal, E., Castro, M. (2014). Laboratory as a Service (LaaS): A Novel Paradigm for Developing and Implementing Modular Remote Laboratories. *International Journal of Online Engineering*, 10(4), 13-21.

8. Lowe, D. (2013). Integrating Reservations and Queuing in Remote Laboratory Scheduling. IEEE Transactions on Learning Technologies, 6(1), 73-84. Machet, T., Lowe, D., Gutl, C. (2012). On the potential for using immersive virtual environments to support laboratory experiment contextualisation. *European Journal of Engineering Education*, 37(6), 527-540.

9. Yeung, H., Lowe, David, & Murray, Steve. (2010). Interoperability of Remote Laboratories Systems. *International Journal of Online Engineering (iJOE)*, 6(SI1), 71-80. doi:10.3991 /ijoe.v6s1.1387

10. Lowe, D., Berry, C., & Murray, S. (2009). Adapting a Remote Laboratory Architecture to Support Collaboration and Supervision. *International Journal of Online Engineering*, 5, 61-66.

11. Lindsay, E., Murray, S., Liu, D., Lowe, D., & Bright, C. (2009). Establishment reality vs maintenance reality: how real is real enough? *European Journal of Engineering Education*, 34(4), 229-234.

12. Lowe, D., & Johnston, A. (2009, In Press). Broadening the admissions criteria for entry in Engineering undergraduate programs. *HERDSA*.

13. Lowe, D., Murray, S., Lindsay, E., & Liu, D. (2009, In Press). Evolving Remote Laboratory Architectures to Leverage Emerging Internet Technologies. *IEEE Transactions on Learning Technologies*.

14. Yusop, N., Zowghi, D., & Lowe, D. (2008). The impacts of non-functional requirements in web system projects. *International Journal of Value Chain Management*, 2(1), 18-32.

15. Kong, X., Liu, L., & Lowe, D. (2007). A Web System Trace Model and Its Application to Web Design. *Journal of Digital Information*, 8(1).

16. Kong, X., L. Liu, D Lowe (2005). "Separation of Concerns: A Web Application Architecture Framework." *Journal of Digital Information* 6(2)

17. Yusop, N., D. Lowe, et al. (2005). "Impacts of Web Systems on their Domain." Journal of Web Engineering 4(4): 313-338.

18. Kong, X., Liu, L. and Lowe, D. (2004) Critical Feature Method — A Lightweight Web Maintenance Methodology for SMEs. *Journal of Digital Information*. Vol 5, No. 2.

19. Tongrungrojana, R. and Lowe, D. (2004) WebML+: A Web Modeling Language for Modelling Architectural-Level Information Flows. *Journal of Digital Information*. Vol 5, No 2.

20. Lowe, D. (2003) Web Requirements: An Overview. *Requirements Engineering Journal*, *8* (2). 102-113.

Refereed Conference papers (Last 6 years only – full list available on request)

1. Lesjak, I., Guetl, C., Pirker, J., & Lowe, D. (2021). Advanced EDU-AR-VIZ : A Framework for selecting appropriate visual augmentations in STEM education. Proceedings of the 24th International Conference on Interactive Collaborative Learning (ICL2021), 1–12. Dresden, Germany: ASEE.

2. Lowe, D., & Kadi, A. (2019). An Analysis of Possible Predictors of Student Early Engagement with Professional Development Opportunities. Research in Engineering Education Symposium (REES).

3. Lowe, D., & Willey, K. (2018). Conceptualising Academic Rigour in Engineering Degree Programs. Proceedings of the AAEE2018 Conference.

4. Burridge, J., & Lowe, D. (2018). Breaking down the Laboratory Supertype Conflation. Proceedings of the FiE 2018: Frontiers in Education Conference.

5. Lowe, D., Johnston, A., Wilkinson, T., & Machet, T. (2018). The relationship between breadth of previous academic study and engineering students ' performance. Proceedings of the FiE 2018: Frontiers in Education Conference.

6. Kadi, A., & Lowe, D. (2018). A new Professional Engagement Program – outline and initial outcomes. Proceedings of the AAEE2018 Conference.

7. Lowe, D., Machet, T., & Wilkinson, T. (2018). Diversity and gender enrolment patterns in an undergraduate Engineering program. Proceedings of the 46th SEFI Annual Conference.

8. Lowe, D., Machet, T., Willey, K., & Berger, A. (2018). The use of constructive alignment in the design of laboratory activities. Proceedings of the 46th SEFI Annual Conference.

9. G. Miao, L. Berry, and D. Lowe, "What can we do to better support students in Thesis? Overview of the Thesis Program," in 28th Annual Conference of the Australasian Association for Engineering Education (AAEE 2017), 2017, pp. 121–128.

10. T. C. Machet and D. Lowe, "Non-expert sensor-based Laboratory development: A prototype mobile application for rapid development, deployment, and sharing of Laboratory experiments," in ASEE Annual Conference and Exposition, Conference Proceedings, 2017, vol. 2017–June.

11. D. Lowe and Z. Liu, "Potential for utilising head-mounted displays (HMDs) for augmenting laboratories," in Proceedings of 2017 4th Experiment at International Conference: Online Experimentation, exp.at 2017, 2017.

12. Hadgraft, R., Lowe, D., Lawson, J. (2016). Enhancing mechanics education through shared assessment design. 2016 123rd American Society for Engineering Education (ASEE) Annual Conference and Exposition, Washington, D.C. http://dx.doi.org/10.18260/p.26700

13. Matchet, T., Lowe, D. (2015). An analysis of the provision of context within existing remote laboratories. Frontiers in Education Conference (FIE) 2015, Piscataway, New Jersey: (IEEE) Institute of Electrical and Electronics Engineers.

14. Tuttle, S., Moulton, B., Lowe, D. (2015). An information taxonomy for remotely-accessible engineering instructional laboratories. 2015 122nd American Society for Engineering Education (ASEE) Annual Conference and Exposition, Seattle

15. Nguyen, K., Lowe, D. (2015). Architectural support for non-expert deployment of remote laboratories. Frontiers in Education Conference (FIE) 2015, Piscataway, New Jersey: (IEEE) Institute of Electrical and Electronics Engineers.

16. Tawfik, M., Lowe, D., Salzmann, C., Gillet, D., Sancristobal, E., Castro, M. (2015). Defining the Critical Factors in the Architectural Design of Remote Laboratories. IEEE Revista Iberoamericana de Tecnologias del Aprendizaje, 10(4), 269-279.

17. Lawson, J., Hadgraft, R., Male, S., Shrestha, S., Lowe, D., Lemckert, C., Von Konsky, B., Deller-Evans, K., McGill, D., et al (2015). Developong a national approach to eportfolios in Engineering and ICT. 26th Annual Conference of the Australasian Association for Engineering Education (AAEE 2015), Melbourne, Victoria: Deakin University.

18. Tuttle, S., Moulton, B., Lowe, D. (2015). Educator Preferences Regarding the Types of Information Desired to Support Decision Making Regarding Adoption of Remotely-Accessible Engineering instructional Laboratories. 26th Annual Conference of the Australasian Association for Engineering Education (AAEE 2015), Melbourne, Victoria: Deakin University.

19. Lowe, D. (2015). Remote laboratories and mediated interactions: the real opportunity for enhancing learning. 20th International Conference on Multimedia in Physics Teaching and Learning (MPTL), 2015, Germany.

20. Wilkinson, T., Lowe, D., Johnston, A. (2015). Success at tertiary level – analysis of factors that impact on improved performance. 26th Annual Conference of the Australasian Association for Engineering Education (AAEE 2015), Melbourne, Victoria: Deakin University.

21. Lowe, D., Johnston, A., Wilkinson, T. (2015). The Validity of High School Performance as a Predictor of University Undergraduate Engineering Performance. 43rd Annual Conference of the European Society for Engineering Education (SEFI) 2015, Brussels: SEFI.