Scientists publishing in English from Indonesia: Evaluating a skill development workshop for authors and mentors

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Indonesian universities are now facing a mandatory requirement for publication of a paper in English in an international journal before PhD graduation, adding to the already strong pressure experienced by academic supervisors/advisors to achieve international publications and citations themselves. Instruction in English academic writing is often extremely limited, and there is a need to test new educational initiatives for strengthening the skills of both mentors and authors for writing for publication in English. Building on an existing network based on previous scientific collaborations, we trialled a 5-day workshop format for developing skills of Indonesian biology academics for both writing papers and mentoring their students' paper writing. The workshop design reflected learning gained from analysis of similar events in Chinese contexts by the first two authors across the period 2001-2014, which featured integration of perspectives from science, applied linguistics and education. Questions addressed in the research presented here are these: 1) To what extent did the confidence of workshop participants to write research articles in English and to mentor their students' article writing change between pre- and immediately post-workshop data collection? 2) What further changes in confidence were reported 12 months post-workshop? 3) What were the subsequent trajectories of the papers that participants worked on at the workshop? 4) What were participants' perceptions of the usefulness of the workshop immediately post attendance and 12 months later, and how did their suggestions for improvements differ between the two time points? Implications are discussed for moves to embed this kind of educational initiative in the research training and professional development activities of IPB, both in the Faculty where it was trialled and in other areas.

Biodata

Margaret Cargill D.Ed. is an applied linguist specialising in the development of research communication skills for scientists who use English either as a first or an additional language. She has over 20 years' experience working intensively with early career researchers and their supervisors. Her current research and teaching interests lie in developing, delivering and evaluating appropriate collaborative pedagogies to enable scientists and language specialists together to assist inexperienced authors in getting their research published in the international refereed literature. She is co-author, with Dr Patrick O'Connor, of *Writing scientific research articles: Strategy and steps* (Wiley-Blackwell 2009, 2013, www.writeresearch.com.au).

Patrick O'Connor BSc (Hons) PhD is Managing Director of the consulting company O'Connor NRM and Visiting Senior Lecturer at the University of Adelaide. Patrick's consulting and research work focusses on the design, creation, implementation and evaluation of markets for ecosystem services. Patrick works on projects aimed at overcoming negative environmental externalities from agricultural production systems and has created markets for the conservation of soil, biodiversity and for carbon sequestration. Patrick also has an interest in applied linguistics and is co-author of the book *Writing Scientific Research Articles: Strategy and Steps*.

Dr. Rika Raffiudin is an entomologist specializing in molecular study of insects and the sensing behaviour of social insects such as bees, termites and ants. She uses molecular techniques for rapid detection of several agriculturally important insects and invasive species. She has been teaching, researching and supervising students working on arthropods and insects for 18 years. She is experienced in constructing DNA markers and DNA Barcodes for tropical insects and has published several papers in international peer-reviewed journals. Dr. Raffiudin has served as Chief Editor for HAYATI Journal of Biosciences, indexed in Crossref and EBSCO and currently hosted by Elsevier.

Nampiah Sukarno PhD is a mycologist specializing in tropical fungal diversity and the biology of fungal symbionts and their application in food, agriculture, health and the environment. She has been teaching, researching and supervising students working on tropical fungi for over 25 years. She is experienced in exploring tropical filamentous fungi and has published several papers in international referred journals. She is also a co-author and research member of *Taxonomic and Ecological Studies of Fungi and Actinomycetes in Indonesia* and was rated highly among Indonesian scientists in the Google Scholar Citations public profiles edition January-June 2015.

Dr. Berry Juliandi is a biologist with special interests in animal structure and development. His current research theme is regulation of neural stem cell differentiation and specification. He is currently Head of the Veterinary Stem Cell Laboratory at Bogor Agricultural University (IPB) and Chief Editor of HAYATI Journal of Biosciences.