

<p><b>Institution: University of Bedfordshire</b></p>
<p><b>Unit of Assessment: 25 – Education</b></p>
<p><b>Title of case study: Improving access to education for marginalised groups</b></p>
<p><b>1. Summary of the impact</b></p> <p>This group of four research studies has improved access to education in schools and higher education (inter)nationally through changes to policy and practice:</p> <ol style="list-style-type: none"> <li>a study of online construction of men and women in science, engineering and technology resulted in a practical toolkit that has informed gender equality in online media;</li> <li>the recommendations of an investigation into support needs of parent students in Higher Education Institutions (HEIs) have informed national policy and practice;</li> <li>material contribution to others' work resulted in development of culturally appropriate pedagogical practices in New Zealand secondary schools and raised Māori students' achievement;</li> <li>research syntheses impacted on teacher professional development in special needs education.</li> </ol>
<p><b>2. Underpinning research</b></p> <p>Qualitative research in schools (observation and interview), surveys and individual case studies, and analysis of documents and web sites related to:</p> <ol style="list-style-type: none"> <li>a study that analysed discourses of gender related to the construction of men and women in science, engineering and technology (SET) in online media (2009-10) concluded that online informational content is male dominated. Women's voices are subject to 'muting' (ref 3a overleaf);</li> <li>case studies of policy and practice associated with support needs of student parents in 10 HEIs in England indicated that University student parents do not receive the support needed to succeed in HE (2010-12). National and university policies should address this issue (ref 3b overleaf);</li> <li>a 7-year large scale mixed methods action research (qualitative and quantitative with statistical data analysis, 2010-11) indicated that teacher professional development focused on deliberate creation of culturally responsive pedagogy and contexts for learning in classrooms can support improved educational achievement of minority ethnic pupils (ref 3c overleaf);</li> <li>syntheses of (inter)national research, and case studies of individual pupils and schools related to the successful inclusion of pupils with special educational needs (SEN) undertaken over 8 years (2004-12) indicate that addressing the needs of children with SEN in schools is a question of problem-solving about the learner, the difficulties/condition, barriers to learning, and interventions (ref 3d overleaf).</li> </ol> <p><b>Key researchers:</b></p> <p>Janice Wearmouth, Professor of Education, (2009 -) in collaboration with University of Waikato          Dr. Marie-Pierre Moreau, Senior Research Fellow, (2009-13) (ref 3a below in collaboration with Goldsmiths, University of London).</p> <p><b>Contextual information:</b></p> <p>The research is informed by sociological and psychological paradigms, drawing largely from social constructivist theories of work, education and inequalities and socio-cultural understandings of learning and behaviour. We recognise the key influence of social structures of power (gender, social class, family circumstances, ethnicity, disability) in developed and developing societies, while also acknowledging individuals' agency.</p> <p>Research has been carried out in the UK and New Zealand, funded by the UK Resource Centre for Women in SET (UKRC), Nuffield Foundation and University of Waikato (New Zealand - NZ), with further funding for dissemination of findings from the Leadership Foundation for Higher Education. The Institute for Research in Education (IREd) has hosted colleagues involved in the research cited here from other UK universities and NZ.</p>
<p><b>3. References to the research</b></p> <p>(a) <b>Authors: Moreau, M.P. &amp; Mendick, H.</b>, Discourses of Women Scientists in Online Media: Towards new gender regimes. 2012, <i>International Journal of Gender, Science &amp; Technology</i> 4(1), : <a href="http://genderandset.open.ac.uk/index.php/genderandset/article/view/222/384">genderandset.open.ac.uk/index.php/genderandset/article/view/222/384</a></p>

## Impact case study (REF3b)

**Evidence of quality:** Quality is evidenced both by its inclusion in peer-reviewed journals and in invitations to give papers in universities in England, including at the Institute of Physics:

- Moreau, M.P. & Mendick, H., Discourses of Women Scientists in Online Media: Towards new gender regimes?, *International Journal of Gender, Science & Technology* 4(1) (2012), online access: [genderandset.open.ac.uk/index.php/genderandset/article/view/222/384](http://genderandset.open.ac.uk/index.php/genderandset/article/view/222/384)
- Mendick, H. & Moreau, M.P., *Online representations of scientists and gender equity*, King's College London, 9 June 2011 (**Invited seminar**).
- Mendick, H. & Moreau, M.P., *Monitoring the Presence and Representation of Women in SET Occupations in UK Based Online Media*, Institute of Physics, London, 2 December 2010 (**end of project seminar**).

**Research grant awarded to:** Mendick, H. (Goldsmiths, London) and Moreau, M.P. (University of Bedfordshire), **Title of project:** Monitoring the presence and representation of women in SET occupations in UK-based online media, **Sponsor:** United Kingdom Resource Centre for Women in SET (UKRC), **Period of grant:** 2009-10. **Value of grant:** £20k

**(b) Authors: Moreau, M.P. & Kerner, C.,** Supporting Student Parents in Higher Education: A policy analysis, 2010-12, Nuffield Foundation, London, [www.nuffieldfoundation.org/sites/default/files/files/Moreau%20Student%20Parent%20report%20-%20Full%20report%20October%202012.pdf](http://www.nuffieldfoundation.org/sites/default/files/files/Moreau%20Student%20Parent%20report%20-%20Full%20report%20October%202012.pdf) .

**Research grant awarded to:** Moreau, M.P. & Kerner, C., **Title of project:** Supporting Student Parents in Higher Education: A policy analysis, **Sponsor:** Nuffield Foundation, **Period of grant:** Dec 2010-September 2012. **Value of grant:** £25k

**(c) Authors: Bishop, R., Berryman, M., Wearmouth, J., Peter, M. & Clapham, S.,** Te Kotahitanga: Maintaining, replicating and sustaining change in Phase 3 and Phase 4 schools: 2007-2010, 2011, Peer-reviewed research report: publ: New Zealand: Ministry of Education, Wellington, [edcounts.squid.net.nz/data/assets/pdf\\_file/0007/105838/988\\_TeKotahitanga.pdf](http://edcounts.squid.net.nz/data/assets/pdf_file/0007/105838/988_TeKotahitanga.pdf)

**Evidence of quality:** Quality is evidenced by the rigorous peer-review process of the report by Professor Stuart McNaughton (University of Auckland), and by subsequent publication of two rigorously peer-reviewed articles published in 2012 in prestigious American journals (*Teaching and Teacher Education*, 28(5): 694-705); *School Effectiveness and School Improvement*, 23(1): 49-70). Te Kotahitanga won World Innovation Summit for Education award (2013) for its 'tangible, positive impact upon society and innovative approach to solving important educational challenges'.

**Research consultancy, Awarded to:** Professor Janice Wearmouth, **Title of project:** Te Kotahitanga, Phases 3 and 4, research report, **Sponsor:** University of Waikato/New Zealand Ministry of Education, **Period of consultancy:** May-December, 2010. **Value of consultancy:** NZ\$92K

**(d) Author: Wearmouth, J.,** *A Beginning Teacher's Guide to Special Educational Needs*, 2009, Open University Press. ISBN: 13: 978 0335 23354 0

**Evidence of quality:** Quality is evidenced by peer-reviewed national book award for contribution to teacher professional development given by the National Association for Special Educational Needs.

### 4. Details of the impact

This section sets out the required details in relation to each research area separately.

#### i) Online constructions of men and women in SET (ref 3a)

##### *Contribution to impact*

This was the first study conducted in the UK to investigate how the unequal construction of men and women in SET within online media influences young people and develop ways to address inequality.

##### *Nature of impact*

The UKRC developed a practical toolkit from the research findings that enabled improvement in gender equality at international level in the work of those involved in the authorship of web pages and social media

[www.wisecampaign.org.uk/files/useruploads/files/104877\\_ukrc\\_toolkit\\_women\\_online\\_a4.pdf](http://www.wisecampaign.org.uk/files/useruploads/files/104877_ukrc_toolkit_women_online_a4.pdf)

## Impact case study (REF3b)

*Dissemination of research*

The research has been disseminated through a report, several conference and seminar presentations (including one seminar as part of a training programme for women scientists):

- Mendick, H. and Moreau, M.P., *Online representations of scientists and gender equity*, King's College London, 9 June 2011 (**Invited seminar**).
- Mendick, H. and Moreau, M.P., *Monitoring the Presence and Representation of Women in SET Occupations in UK Based Online Media*, Institute of Physics, London, 2 December 2010.

There are also blogs on the internet (online article on the GEA website: [www.genderandeducation.com/issues/research-launch-women-scientists](http://www.genderandeducation.com/issues/research-launch-women-scientists))

*Researcher role within research project***ii) The needs of student parents in HEIs (ref 3b)***Contribution to impact*

While student parents are a growing presence in higher education, national and university policies continue to address the needs of students as if they had no caring responsibilities. This piece of research informs the national debate about what appropriate support would look like.

*Nature of impact*

Outcomes of the research were disseminated to practitioners and policy-makers to translate findings into practice: the NUS included the work in a policy briefing document sent to their welfare and social policy advisers in the UK, (October, 2012) and the Leadership Foundation for Higher Education commissioned a briefing paper for university senior managers from Moreau (budget: £2,500).

*Dissemination of research*

Findings were disseminated worldwide on the websites of the press, policy-making and professional organisations: the *Guardian* newspaper ([www.guardian.co.uk/higher-education-network/blog/2012/dec/13/student-parents-university-support-care](http://www.guardian.co.uk/higher-education-network/blog/2012/dec/13/student-parents-university-support-care)), Equality Challenge Unit (ECU), Skills Development Scotland, Scotland's Colleges, Gender and Education Association ([www.genderandeducation.com/issues/car/](http://www.genderandeducation.com/issues/car/)) and National Association of Student Money Advisers.

**iii) Raising Māori students' achievement (ref 3c)***Contribution to impact*

Underachievement of Māori students in New Zealand is longstanding. Te Kotahitanga is a research and development project that has improved the achievement and attendance of Māori students in over 50 secondary schools in New Zealand (see ref 3c) by statistically significant levels through a programme of teacher professional development. This programme increased teachers' use of culturally appropriate pedagogies derived from an Effective Teaching Profile that was developed within the project. (See below for Wearmouth's role.)

*Nature of impact*

The spread is across 56 out of about 400 secondary schools in New Zealand, where, as a result of the research, teachers' practices were changed to accommodate culturally appropriate pedagogy and led to statistically significant improvements in Māori students' attendance, engagement and academic results between the beginning of the project and 2011 as evidenced in reference c above. Around 12% of school population are Māori and, hence, may be impacted. In addition, the reports of the project and associated research and development methodology have influenced government policy and teachers' practices in many other secondary schools, e.g. the New Zealand Ministry of Education (MoE) has used aspects of Te Kotahitanga in other initiatives related to Māori students' achievement: the national Māori strategy Ka Hikitia (Māori students achieving education success as Māori) is based largely on Te Kotahitanga and is influencing education at all levels [www.minedu.govt.nz/NZEducation/EducationPolicies/MaoriEducation](http://www.minedu.govt.nz/NZEducation/EducationPolicies/MaoriEducation). Further, the MoE's Registered Teachers' criteria that frame teachers' accreditation are based on the Effective Teaching Profile, as can be demonstrated through inspection of the MoE's publication.

*Dissemination of research*

Research outcomes are regularly disseminated through teachers' conferences and workshops (e.g. University of Waikato, December 2010), news broadcasts by the NZ national broadcasting authority and newspaper articles.

*Researcher role within research projects*

For 6 months in 2010 Wearmouth drew on materials from the UoB group's conceptual frameworks during a research consultancy at the University of Waikato where she carried out part of the project's data collection and evaluation, and led the compilation and authoring of the evaluation report.

**iv) Inclusive education (ref 3d)**

*Contribution to impact*

This work brings together concern for learners whose educational experience is problematic with concern for professionals who have to deal with problems that are experienced, and facilitate opportunities for learning. International research, including work within the group, has been translated, theorised and synthesised to make it accessible to professionals from a wide range of backgrounds.

*Nature of impact*

The research synthesis has informed/improved the work of others in teacher professional development (PD), as evidenced by NASEN (2009) national book award for contribution to teachers' PD, given to Wearmouth. Potentially 20% of the child population of school age might be impacted through the improvement of teachers' practices in SEN provision.

*Dissemination of research*

To date the book has sold 1479 copies in the UK and internationally, including USA, Canada, Australia, New Zealand, as evidenced in university library catalogues. Outcomes are regularly disseminated through conferences and articles in international journals and conferences.

*Researcher role within research projects*

The work began at the Open University (OU) in 2000, included staff at the OU from 2004, was extended to include researchers from the Universities of Wellington and Waikato in New Zealand, and continued in UoB from 2009 with research into SEN provision in mainstream schools and publication of further books and journal articles.

**5. Sources to corroborate the impact**

1. NUS Social Policy Briefing related to student parents in HEI project:  
[www.nuffieldfoundation.org/sites/default/files/files/Moreau%20Student%20Parent%20report%20-%20Exec%20Summary%20October%202012.pdf](http://www.nuffieldfoundation.org/sites/default/files/files/Moreau%20Student%20Parent%20report%20-%20Exec%20Summary%20October%202012.pdf)
2. Vice Chancellor's (previously Dean of School of Education) letter from Waikato re. Wearmouth's role on Te Kotahitanga.
3. Peer-reviewed research report on the impact of Te Kotahitanga:  
[edcounts.squiz.net.nz/\\_data/assets/pdf\\_file/0007/105838/988\\_TeKotahitanga.pdf](http://edcounts.squiz.net.nz/_data/assets/pdf_file/0007/105838/988_TeKotahitanga.pdf)
4. Te Kotahitanga web site evidencing impact: [www.tekotahitanga.tki.org.nz](http://www.tekotahitanga.tki.org.nz)
5. NASEN web site contains details of Wearmouth's national book award:  
[www.nasen.org.uk/latestnews/?news=24](http://www.nasen.org.uk/latestnews/?news=24)