

## Impact case study (REF3b)

<b>Institution:</b> University of York
<b>Unit of Assessment:</b> 25, Education
<b>Title of case study:</b> School-based in-service education and training in Tanzania and Kenya
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>In 2008, Professor Frank Hardman led a baseline study of pedagogic practices in Tanzanian primary schools to inform the design of a national school-based in-service education and training (INSET) programme. In February 2011, a pilot of the programme was launched and in August 2012 Hardman was commissioned to lead on an evaluation of the pilot, building on the 2008 baseline. Based on the findings of the 2012 evaluation, the Tanzanian Ministry of Education and Vocational Training (MoEVT) and Prime Ministers' Office–Regional Administration and Local Government (PMO-RALG) are currently planning a national scale-up of the INSET programme.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>In 2008, Hardman (Professor, Department of Education, 2008-2011, Institute for Effective Education, 2011-present), in collaboration with Dr Jan Abd-Kadir (Lecturer, Department of Education, 2009-present), were commissioned by UNICEF to conduct a baseline study of teaching and learning practices in Tanzanian primary schools to inform the design of the MoEVT national INSET strategy launched in 2009. The research design drew on earlier studies of classroom interaction and discourse led by Hardman in England, Kenya and Nigeria.</p> <p>A stratified sample of 32 primary schools serving urban and rural contexts from 8 of the 36 regions in mainland Tanzania was selected. Working in pairs to ensure inter-rater reliability, 20 observers completed 2 schedules capturing the proportion of time and frequency of whole class, group and individual tasks/activities taking place in 236 lessons covering the teaching of English, Kiswahili, mathematics and science at grades 3 and 6. In addition to the timeline and frequency analysis, 40 lessons were digitally recorded and intensively analysed using computerised systematic observation and discourse analysis of transcripts. All 4 approaches provided a clear and systematic basis for analysing and quantifying the teacher-pupil interactions at the macro and micro level. Interviews were also conducted with district officers, head teachers, teachers, pupils and parents to assess INSET provision and its impact on teaching quality.</p> <p>The baseline found most classroom talk was teacher-fronted and made up of teacher-led explanation, punctuated by a question and cued answer approach, in which the teacher constantly demanded pupil 'participation' through the completion of phrases, repetition of words and choral affirmation of 'understanding'. It therefore led to the perpetuation of a restrictive, often monotonous, model of teaching and learning with little exposure to different functions of language. The study also found that there was little in the way of systematic INSET to improve the narrow pedagogical practices.</p> <p>Building on the findings, a school-based INSET programme was designed and piloted in 2011 in the 7 of the 8 district councils where the baseline had been conducted. In late 2012, a follow-up evaluation replicating the 2008 baseline and using a control-group design was conducted to investigate the extent to which the pilot had impacted on classroom pedagogy, met the objectives of the national INSET strategy, and how it could be scaled up at a national level.</p> <p>Overall, the findings from the classroom observations and stakeholder interviews showed that the INSET pilot was well received at the district and school level, and had brought about significant changes in teaching and learning practices in the intervention schools. For example, it was found that 63% of the INSET trained teachers used some form of peer interaction in their lesson compared to just 6% of the non-trained teachers. A similar picture emerged with the use of open-ended questions (i.e. questions eliciting a range of responses): INSET trained teachers were twice as likely to ask an open question (11% compared to 3% asked by non-INSET trained</p>

teachers). Overall, it was found that the pedagogical practices of the non-INSET trained teachers matched those teachers in the 2008 baseline.

### 3. References to the research (indicative maximum of six references)

1. Hardman, F., Abd-Kadir, J. & Tibuhinda, A. (2012). Reforming Teacher Education in Tanzania. *International Journal of Educational Development* 32 (6), 826 – 83. <http://www.sciencedirect.com/science/article/pii/S073805931200003X>
2. Hardman, F., Ackers, J., O'Sullivan, M. & Abrishamian, N. (2011) Developing a systematic approach to teacher education in sub-Saharan Africa: emerging lessons from Kenya, Tanzania and Uganda. *Compare: Journal of Comparative and International Education*, 41 (5), 669 – 684. DOI: 10.1080/03057925.2011.581014
3. Hardman, F., Abd-Kadir, J., Agg, C. Migwi, J., Ndambuku, J. & Smith, F. (2009) Changing pedagogical practice in Kenyan primary schools: the impact of school-based training. *Comparative Education*, 45 (1), 65 – 86. DOI: 10.1080/03050060802661402
4. Hardman, F., Abd-Kadir, J. & Smith, F. (2008) Pedagogical renewal: improving the quality of classroom interaction in Nigerian Primary Schools. *International Journal of Educational Studies*, 28 (1), 55 – 69. Available on request.
5. Abd-Kadir, J. & Hardman, F. (2007) The discourse of whole class teaching: a comparative study of Kenyan and Nigerian primary English lessons. *Language and Education*, 21 (1), 1 – 15. DOI: 10.2167/le684.0
6. Pontefract, C. & Hardman, F. (2005) Classroom Discourse in Kenyan Primary Schools. *Comparative Education*. 41 (1), 65 – 86. DOI: 10.1080/03050060500073264
7. Ackers, J., & Hardman, F. (2001). Classroom Interaction in Kenyan Primary Schools. *Compare: Journal of Comparative and International Education*. 31 (2), 245 – 261. DOI: 10.1080/03057920120053238

#### Evidence of the quality of the research:

Research outputs 1 – 7 are all published in leading international peer reviewed journals in international development and education and all are based on substantial empirical data drawn from Tanzania, Kenya, Nigeria and Uganda.

The quality of the research has been recognised through citations and downloads from the journal websites. All are listed as the most widely cited or downloaded in each of the respective journals. For example, output 7 on the Kenyan baseline according to Scopus (September 2013) has 7 citations and is one of the most read articles in the *Compare* journal (149 views) along with output 2 (541 views and 6 citations) comparing developments in the implementation of school-based in 3 east African countries. Similarly output 4 is one of the most widely cited and read in the IJED journal (16 citations and 541 views), and outputs 3 and 6 on the Kenyan baseline evaluation, both published in *Comparative Education*, have been cited 4 and 6 times, and viewed 113 and 258 times, respectively. Output 5 is also listed as one of the most cited (6 times) and viewed (168 times) articles in *Language and Education*. Although only published in 2012, output 1 on the Tanzanian baseline has been cited 4 times and viewed over a hundred times.

### 4. Details of the impact (indicative maximum 750 words)

The research outlined above has been highly influential in transforming teacher education in Tanzania and Kenya. The 2008 baseline study in Tanzania showed that where teachers had not received school-based INSET they used a limited repertoire of whole class teaching. In response to the findings of the baseline, the Ministry of Education and Vocational Training (MoEVT) of Tanzania published an INSET strategy in 2009 recommending the development of a systemic approach to teacher development. It included the use of school-based INSET supported by distance learning materials, school clusters and local support agents to work with head teachers and teachers in the schools. Throughout 2010, the strategy was approved following a highly consultative process which involved ministries, departments and agencies, development partners and civil society organisations, and training modules for teachers were developed in three key

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areas: mathematics, English and pedagogy.

In 2011, the MOEVT began piloting the school-based INSET model in the seven district councils used for the baseline with a view to implementing the INSET strategy nationally. 141 schools took part in the pilot and 2,052 primary school teachers received training in the teaching of mathematics and English. The teachers also received mentoring, classroom observation and feedback from peers, head teachers and teacher educators. Following the publication of the evaluation findings in December 2012 suggesting that systematic, school-based training can significantly improve pedagogical practices, and that it is more cost-effective than traditional college-based provision at only a third of the cost, a national scale-up of the school-based INSET programme by MoEVT and Prime Ministers' Office–Regional Administration and Local Government (PMO-RALG) is being planned for implementation in 2014.

Evidence of the impact of research led by Hardman on school-based INSET can also be seen in neighbouring Kenya where his research helped to shape the design and implementation of the School-based Teacher Development (SbTD) programme. It was to have a major influence on the design of Tanzania's school-based INSET programme following a visit from a senior team of advisors from MoEVT during the 2010 consultation period. Hardman began working on SbTD in 1999 when he was commissioned by Department For International Development (DFID) to design a national baseline study of classroom interaction practices in Kenya to inform the design and implementation of the school-based programme. SbTD was developed as a programme of self-study, using distance-learning modules combined with regular face-to-face cluster meetings.

Over 47,000 primary school teachers throughout Kenya successfully graduated from SbTD in the three core subjects of English, mathematics and science. Three teachers from every school, called Key Resource Teachers (KRTs) were trained to lead school-based professional development within their subject area in their schools. The programme was supported by a zonal-based teacher advisory system of over 1,000 teacher advisory centre tutors, who were trained to provide group-based support service to the KRTs who were working with distance learning materials while carrying a full-time teaching load in the schools. It was subsequently evaluated by Hardman in 2005 and significant changes were found in the pedagogic practices of those teachers who had undergone the training compared to the baseline that showed an overwhelming level of teacher-led rote and recitation and the chorusing of answers.

In 2006, building on the evaluation findings, 18,000 head teachers were given training in curriculum leadership and whole school development to support school-based training, and SbTD was expanded to include the teaching of Kiswahili and training in guidance and counselling. Subsequently, in 2010, Professor Hardman led on the development of a quality assurance framework that built on the observation schedules used in the baseline and evaluation studies. By 2012, all of Kenya's 6,000 school quality assurance officers were trained to use the inspection manual and 30,000 copies of the framework were distributed to all government schools to assist in self-appraisal and to help in preparation for an inspection visit.

Based on the impact of his research into teacher education in the Kenya and Tanzania, other countries in the East African region are considering implementing school-based INSET training. As a result, Hardman has been invited to speak at a range of regional conferences on teacher education. For example, in the past 2 years, he presented keynote speeches at conferences in Rwanda (November 2011), Tanzania (December 2012), Kenya (March 2011 and October, 2013) and Mozambique (October, 2013).

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

The following people have agreed to provide supporting evidence for the impact of our research on teacher education in Tanzania and Kenya:

1. Senior Education Advisor, European Commission (on secondment from DFID). Commissioned the 2005 Kenyan evaluation.

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2. Director of Teacher Education in the Ministry of Education and Vocational Training, Tanzania, from 2008 until 2012. Can comment on the impact of the baseline evaluation.
3. UNICEF Chief of Education in Tanzania. Can provide supporting evidence on the impact of the baseline evaluation of the INSET pilot.
4. Regional Advisor on Basic Education and Gender Equality, UNICEF, Eastern and Southern African Regional Office. Responsible for commissioning the Kenyan (for DFID) and Tanzanian (for UNICEF) classroom interaction baseline studies. Currently, responsible for teacher development in the Eastern and Southern African region covering 21 countries and so can comment on the impact of the research on regional developments.

The following MoEVT/PMO-RALG publications show the direct impact the research has had on policy and practice with regard to teacher education in Tanzania:

1. MOEVT (2009) *In-service Education and Training Strategy (INSET) for Primary School Teachers 2009 - 2013*. Ministry of Education and Vocational Training, Dar Es Salaam.
2. MOEVT (2012) *Evaluation of School-Based INSET Pilot Programme*. Ministry of Education and Vocational Training, Dar Es Salaam.

The impact of the pilot school-based INSET have been widely covered in the national press in Tanzania. See, for example, 'Ministry launches special training for teachers' *The Citizen* 25 February 2011 reporting on launch of Tanzanian pilot primary INSET programme.