

Institution: ASTON UNIVERSITY
Unit of Assessment: 3: ALLIED HEALTH PROFESSIONS, DENTISTRY, NURSING AND PHARMACY
Title of case study: 5) ASTON RESEARCH REFORMING INTERNATIONAL PHARMACY EDUCATION POLICY
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Statutory regulators from Great Britain and Ireland commissioned Professors Keith Wilson and Christopher Langley to undertake research at Aston University to establish an evidence-base for pharmacy educational reform. These systematic evaluations, conducted between 2003 and 2010, have redefined pharmacy education in Great Britain and Ireland, notably resulting in a re-focus on patient need. Arising from the influence of Aston research, the following impacts on policy, practitioners and services resulted in;</p> <ul style="list-style-type: none"> • An evidence-base for pharmacy educational reform in Great Britain. • A revised national government policy in the development of pharmacy workforce capability. • A restructuring of pharmacy education policy and guidelines in Ireland.
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The international climate of pharmacy is re-professionalising from a technical to a more clinically-oriented profession. Since 2003, Professors Wilson and Langley (then lecturer) have developed a programme of research, commissioned by national statutory regulators for pharmacy. Using a matrix of quantitative and qualitative research techniques to establish the strengths and weaknesses of current national systems of pharmaceutical education to first registration, the views of a wide variety of key stakeholders were gathered. The resultant peer-reviewed reports have been instrumental in forming recommendations to government, and to statutory regulatory bodies for pharmacy, on the optimal ways to advance pharmacy education and training to professional qualification.</p> <p>Research findings have been analysed in the context of international changes in health education across multiple professions, and have been grounded in current educational theory. A series of research instruments were developed which have been employed to elucidate an understanding of the educational process from the perspective of all stakeholders including educators, students, health professionals and professional regulators.</p> <p>Commissioned by the then regulator for pharmacy in Great Britain (GB), the Royal Pharmaceutical Society of Great Britain, and following a national tendering process, we were the first research team to undertake a national base-line assessment of pharmacy undergraduate education, and to conduct a parallel review on the educational and career motivations of students entering a period of education leading to potential membership of a healthcare profession (S3.4; S3.5). Our 2005 report "<i>MPharm Programmes: Where are we now?</i>" (S3.1) provided a unique baseline understanding of the teaching, learning and assessment methods and educational philosophy used</p>

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within UK MPharm degrees, just at the time of market expansion. In parallel, publication of the 2006 report "*Pharmacy undergraduate students: career choices and expectations across a four-year degree programme*" (S3.2), examined students' motivation for studying pharmacy and established a baseline of the career aspirations, motivations and expectations of students within undergraduate pharmacy education in the UK.

Building upon the GB work, research undertaken by Wilson and Langley, commissioned by the regulator for pharmacy in Ireland (the Pharmaceutical Society of Ireland, PSI) and following European tender, has examined the entire educational process up to first registration in Ireland (S3.6). Results from the peer-reviewed Pharmacy Education and Accreditation Reviews (PEARs) Report (S3.3) included six major evidence-based recommendations, the most important two being:

- The current 4+1 model of pharmacy education to first registration (where students spend four years at university and then undertake a pre-registration year in practice) should be replaced by a five-year fully integrated programme of education, training and assessment as the basis for application for registration as a pharmacist (Recommendation 1).
- To ensure successful implementation, the development and delivery of the new integrated programme of pharmacy education, training and assessment should be assisted by the establishment of a National Forum (Recommendation 2).

Key Researchers and dates:

K. Wilson (Lecturer 1976 - 1995, Senior Lecturer 1995 – 2003, Professor 2003 - date).

C. Langley (Lecturer 2001 - 2008, Senior lecturer 2008 - 2011, Reader 2011 - 2012, Professor 2012 - date).

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

1. Keith Wilson, Jill Jesson, Chris Langley, Laura Clarke and Katie Hatfield. MPharm Programmes: Where are we now? Report commissioned by the Pharmacy Practice Research Trust. September 2005. ISBN 0-9544961-9-1. 12 citations. Available from: <http://www1.aston.ac.uk/EasySiteWeb/GatewayLink.aspx?allid=24240>
2. Keith Wilson, Jill Jesson, Chris Langley, Laura Clarke and Katie Hatfield. Pharmacy undergraduate students: career choices and expectations across a four-year degree programme. Report commissioned by the Pharmacy Practice Research Trust. 10 citations. August 2006. ISBN: 0-9550029-5-8. Available from: <http://www1.aston.ac.uk/EasySiteWeb/GatewayLink.aspx?allid=24221>
3. Keith Wilson and Christopher Langley. Pharmacy Education and Accreditation Reviews (PEARs) Project. Report commissioned by the Pharmaceutical Society of Ireland. June 2010. ISBN: 978-0-901818-12-6. Available from: http://www.thepsi.ie/Libraries/Education/PEARs_Project_Report.sflb.ashx
4. An evaluation of teaching and learning methods in UK Schools of Pharmacy. Project commissioned and funded by the Royal Pharmaceutical Society of Great Britain (£60,000 awarded to Wilson (PI), Jesson and Reddy 2003-2005; available on request).
5. Profile of motivation and aspirations of entrants to pharmacy for a career in pharmacy. Project commissioned and funded by the Royal Pharmaceutical Society of Great Britain (£60,000 awarded to Wilson (PI), Jesson and Reddy 2003-2006; available on request).
6. Review of pharmacy education in Ireland. Project commissioned and funded by the Pharmaceutical Society of Ireland (£97,000 awarded to Wilson and Langley, 2008-2010 available on request).

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

In both GB and Ireland, our research reports (S3.1; S3.2; S3.3) have underpinned governmental and regulatory body proposals for major restructuring of the format of, and approach to, pharmacy education to first registration. These proposals relate to both the four-year undergraduate degree and pre-registration training period, and also focus on a recalibration of the pedagogic strategies to increase work-placed learning and to connect the university learning with practice.

An evidence-base for pharmacy educational reform in Great Britain

Results from our work undertaken within GB (S3.1; S3.2) are informing current (2013) governmental and regulatory body policy for the development of pharmacy education to first registration. Both reports have become key resources within the field of pharmacy education research and have had a direct impact on the content of the General Pharmaceutical Council's (GPhC) publication *Future pharmacists: Standards for the initial education and training of pharmacists* (S5.1). *Future pharmacists* is the publication which contains the new baseline educational standards for pharmacy undergraduate and pre-registration education, which all Schools of Pharmacy in Great Britain are required to meet to remain accredited (S5.2).

Revised national government policy in the development of pharmacy workforce capability

Furthermore, both reports (S3.1; S3.2) have informed the 2011 Modernising Pharmacy Careers (MPC) Discussion Paper on recommended major reforms of pre-registration pharmacy education. The MPC programme was driven by the Department of Health and linked into Medical Education England (MEE), which had an advisory role to the Minister of State on the education and training of doctors, dentists, health scientists and pharmacists. Our research formed part of the evidence-base used within Workstream I (the Workstream examining education to first registration) of MPC to develop the discussion paper (S5.3) recently approved by MEE for recommendation to the Minister of State proposing a fundamental change in the pattern of pharmacy education (S5.4).

Restructuring of pharmacy education policy and guidelines in Ireland

The 2010 PEARs Report (S3.3) formed a root and branch review of the five-year programme of pharmacy education and training in Ireland, together with a review of accreditation models and criteria. This is the first time an entire country's pharmaceutical education to first registration has been examined in such detail, and since publication the recommendations have formed the basis for educational change for pharmacy education over the subsequent fifteen to twenty years.

The PEARs recommendations were endorsed by the Council of the PSI, who began implementing them in their entirety following presentation to, and full acceptance by, the Minister for Health and Children in Dublin on 8th July 2010 (S5.5). The PSI Council commenced full implementation, firstly by establishing the National Forum for Pharmacy Education and Accreditation in March 2011 to oversee the development and on-going delivery of the new integrated programme of pharmacy education, training and assessment for roll out in the near future. It aims to produce more clinically-focused pharmacists who will be positioned to play a critical role in the delivery of future integrated

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healthcare services in Ireland, as well as enhancing their career opportunities in all areas of practice including the pharmaceutical industry (S5.6.7). On 1st April 2011, the PSI issued a call for expressions of interest from pharmacists with an interest/expertise in education, training and assessment to participate in the work of the National Forum (S5.8). The National Forum's Terms of Reference were published in July 2011 and link directly to the second of the six major recommendations from our work (S5.9). The first meeting of the National Forum took place in August 2011.

On 2nd February 2012, the National Forum was officially launched by the Taoiseach who stated in support of the implementation of the PEARs Report recommendations: "*I strongly welcome the new pharmacy model which will help to position Ireland at the forefront internationally of pharmacy innovation and education*". At the same event, The PSI President said "*The National Forum [...] provides an opportunity to engage with all the relevant stakeholders to ensure that in the future the pharmacy profession can meet the needs of patients, industry, communities and pharmacists themselves.*" (S5.7). In parallel, the PSI has developed new accreditation standards (Recommendation 5) and a new accreditation process (Recommendation 6) to give effect to two more of the recommendations from the PEARs report (S5.10). In July 2013, the Council of the PSI agreed the policy areas that required a statutory underpinning to give effect to the new qualification and drafting commenced in the last quarter of 2013 with a view to facilitating commencement of the new degree in the near future.

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

1. Future pharmacist: Standards for the initial education and training of pharmacists. General Pharmaceutical Council. May 2011. See: http://www.pharmacyregulation.org/sites/default/files/GPhC_Future_Pharmacists.pdf.
2. Supporting statement from the Head of Education & Registration Policy, General Pharmaceutical Council.
3. Anthony Smith and Robert Darracott. Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. Discussion paper. Medical Education England. See: http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf.
4. Supporting statement from the Head Research at the Royal Pharmaceutical Society of GB.
5. Supporting statement from the Head of Professional Development and Learning, Pharmaceutical Society of Ireland.
6. See: http://www.thepsi.ie/gns/education/current-developments/National_Forum.aspx.
7. See: http://www.thepsi.ie/tns/news/latest-news/12-02-02/Taoiseach_Says_New_Pharmacy_Education_and_Training_Structures_Will_Support_Future_of_Irish_Healthcare.aspx.
8. See: http://www.thepsi.ie/Libraries/Education/National_Forum_call_for_expressions_of_interest_FINAL_06042011.sflb.ashx.
9. See: http://www.thepsi.ie/Libraries/Education/TermsOfRefNationalForum_FINAL_rev1.sflb.ashx.
10. See: <http://thepsi.ie/gns/education/accreditation.aspx>