

**Title**

Learning the hard way: 10 lessons for developing undergraduate curricula

**Corresponding author**

Hannah Jacob

UCL Institute of Child Health

30 Guilford Street

London

WC1N 1EH

United Kingdom

02072429789

[hcjacob@gmail.com](mailto:hcjacob@gmail.com)

**Co-author**

Dr Caroline Fertleman

Department of Paediatrics

Whittington Hospital

London

United Kingdom

**Word count (excluding abstract)**

1141

**Word count (including abstract)**

1203

## **Learning the hard way: 10 lessons for developing undergraduate curricula**

### **ABSTRACT**

**Objective** To outline key learning points from two years developing a national undergraduate curriculum for child health.

**Results** A series of semi-structured musings from beleaguered educationalists which may serve to reassure others engaged in developing undergraduate curricula that it is possible to survive the process and even to produce something quite good.

**Conclusion** Do it, but don't say we didn't warn you.

Following two years developing a national undergraduate child health curriculum, we felt it would be appropriate and important to share some of the lessons we have learnt during the process. The challenges of changing the status quo and techniques for winning round those who resist are well documented.<sup>1</sup> Here, we seek to offer both some tips for what to expect and some suggestions for how common difficulties can be overcome.

#### **1. Beware the specialist**

Asking a range of clinicians and academics what should be included in the curriculum is one way of ensuring that the final product is balanced and useable. The danger of doing this, however, is that everyone thinks their sub-speciality is the most important. People tell you knowledge of paediatric post mortems is essential learning for all medical students. Or that congenital cardiac defects are in the top five things undergraduates need to know about child health. Let's face it, they aren't.

#### **2. People love to moan**

Another downside of an inclusive approach to curriculum development is that you have to listen to the views of lots of people. Mostly negative ones. *'They learn too much of this'*,

*'we don't get enough exposure to that', 'students used to be on the wards all the time'*. So brace yourself to be a sounding board for all the things people want to say and have no other outlet for.

### **3. Undergraduate training cannot take 50 years**

Despite what some might want, at some point medical students have to graduate and actually get a job. This may not be a particularly welcome thought but it's the reality and that's probably going to mean some kind of limit on the amount we can include in their training. It would be lovely for them to cover all 50 pages of those learning objectives in five weeks but it's probably not going to happen and we need to prioritise what is important.

### **4. Nothing is forever**

After all the blood, sweat and tears, you would hope that the curriculum might stick around for a while, but that is just not how it works. We know that a curriculum is a child of its time and that context is everything. Our child health curriculum has been developed in the midst of the Shape of Training Review and amid recent data about poor child health outcomes in the UK compared to other European countries.<sup>2,3</sup> No doubt it will be completely obsolete in 10 years when postgraduate training and the configuration of child health services are unrecognisably different.

### **5. Bottom up has something to offer**

Despite coming under considerable criticism for the involvement of medical students, junior doctors and parents in developing our curriculum, it is no surprise that their insights were often the most useful, pragmatic and relevant. The views of a doctor in his first year of paediatric training about what he wished he had known as a Foundation Year 2 doctor in general practice were invaluable. Similarly, the reflections of senior medical students about

what had worked well and what had been missing from their child health placements. Not to mention the humanity and honesty offered by parents and young people who had been the recipients of care. Ignore the punters at your peril.

#### **6. Everyone has an agenda**

Whether it is based in deep rooted traditions in a medical school or a hell-bent desire to improve recruitment to the specialty, everyone wants something. This is not necessarily a problem but is worth remembering in those moments when you are told *'it will never work'* or *'I can't see the point in doing this'*. Experts in change management warn that those who are best off with the status quo may be the most reluctant to embrace change, fearing that they stand to lose. Having an agenda is fine but if someone is not explicit about what theirs is, you need to find out.

#### **7. Sharing is not everyone's cup of tea**

We deliberately set out to start conversations and get buy-in from a wide range of stakeholders in the curriculum. By and large this was well received and people were willing to give us access to their existing curricula or previous work they had done. We could build on what had already been done and avoid duplication. Inevitably, there were some who did not fancy sharing, wanting to see our stuff without offering theirs. This is par for the course but be prepared to use stealth tactics to get the information you want and consider sharing more generously in return with people who do the same.

#### **8. Being focused is not the same as dumbing down**

A number of (senior) clinicians and academics told us that a national child health curriculum was a waste of time and would only cater for the lowest common denominator. They felt that focusing on the core components of child health would mean medical students would

all end up stupid and have no knowledge or understanding of basic science. This was clearly about their agenda (see point 6) but serves as a reminder that sometimes deep breathing and a stress ball are required.

#### **9. Make it someone else's problem**

As with any curriculum, we had to strike a balance between competencies specific to child health and more generic ones. Everyone wants someone in another specialty to teach the generic skills so they can get on with teaching about their specialist area. It doesn't work like that though. We all need junior doctors to be able to apply ethical principles to a problem, critically appraise a paper and have an understanding of health outcomes across the world. That means we all have a responsibility to commit time and resources to teaching them so you have to be willing for your curriculum to reflect that.

#### **10. #Let'smovewiththetimes**

Medical students cannot and should not be learning the stuff we were learning at medical school. Genetic advances, big data and mobile technology have all moved medicine on beyond recognition and curricula have to reflect this. Insisting undergraduates rote learn the childhood immunisation schedule is an idea routed firmly in the 20<sup>th</sup> century. They all have smartphones and Google will give you the schedule in 0.41 seconds (we've checked). Knowledge is everyone's power and what we need our curricula (and more importantly our teaching) to do is equip our students with the ability to manage complexity. It might not be popular with the powers that be but it is real life.

These are just some of the lessons we have learnt on our journey through developing a curriculum. It certainly wasn't an easy process and there were times when it seemed like

the steep hill was in fact leaning towards us. We got there in the end though and now free-wheeling down the other side (sort of), we're pleased we did it.

**Competing interests**

None declared.

**Ethical approval**

Not required.

1. McKimm J and Till A. Clinical leadership effectiveness, change and complexity. *British journal of hospital medicine (London, England : 2005)*. 2015; 76: 239-43.
2. Shape of training: securing the future of excellent patient care. Final report of the independent review led by Professor David Greenaway. . 2013.
3. Viner RM, Hargreaves DS, Coffey C, Patton GC and Wolfe I. Deaths in young people aged 0-24 years in the UK compared with the EU15+ countries, 1970-2008: analysis of the WHO Mortality Database. *Lancet*. 2014; 384: 880-92.