University of Stirling School of Nursing Midwifery and Health:  
10 Steps to Integrating a Quality Improvement Practicum into Our Curriculum

“You must be the change you wish to see in the world.” - Mahatma Ghandi

Background:
From the beginning of January to the end of March 2014, 230 third-year student nurses at the University of Stirling in Scotland undertook small quality improvement (QI) projects (Practicum) as the only academic assignment of their penultimate module. The Practicum was not a voluntary module for a select (or self-selecting) few, but a “Practicum for All” of our third-year cohort. Using the IHI Open School Quality Improvement Practicum as our foundation, students worked on a collection of meaningful, patient-focused projects in approximately 200 different clinical areas across three Health Boards. The Open School asked us to share how we got the program started. The list below is not exhaustive, but hopefully provides you with some valuable steps you can apply in your own local setting:

1. Be brave and be lucky.
This is about being able to recognize opportunity and being willing to do something about it. For example, we earned some money for QI work from an outside body and that took us to the 2012 BMJ/IHI Conference in Paris, where we heard about the IHI Open School Practicum. Within 10 minutes, we had decided to go for it and create a “Practicum for All.” Within a month, IHI gave us online access to the Practicum and we were on our way.

2. Continuously create context.
Being able to exploit the opportunity was also dependent on the work we had done from 2008, including introducing QI into the school curriculum. (This, in turn, depended on our careers/experience up until then.) We started an IHI Open School Chapter, made Open School courses a compulsory part of the curriculum, became a founding member of the Reducing Harm, Improving Care Conferences for health care students, developed online post-graduate QI modules, and developed a Practicum-like assignment over four years. And then we continuously developed the tools, processes, and systems we needed over 21 months to enable students to start the Practicum in January 2014.

3. Use quality improvement methods to create your Quality Improvement Practicum.
I think we regard this as our “secret weapon,” a built-in advantage over other curriculum innovations. We found out about the Practicum in April 2012, stole shamelessly (but acknowledged the source) and eventually adapted it into our own version. We started testing stuff in May 2012. We developed a Project Charter (useful for senior buy-in) and a driver diagram (looks great on a conference poster), and developed a working group with academics, practitioners, and students. We can describe the working group in three words: essential, essential, essential. We recruited students
for a trial that ran in January 2013, and learned more from that than any other event. We ran other learning cycles, too, including running a simulated Practicum and developing an online continuous professional development QI module. Right now, our evaluation strategy is beginning to inform our next round of development.

4. **Work within existing systems when you can, change them when you cannot.**
Systems do not change themselves; people change systems, sometimes on purpose. Be bold about making the case for your Practicum, and work out how it fits into the checks and balances that already exist. For example, we needed to work out how a student, essentially a visitor to a clinical area, could safely institute a change in that area 230 times. We did it by utilizing the existing clinical mentor system and some of the existing documentation, but also by introducing a minimum of extra documentation for written permissions from clinical managers and mentors. These tasks were not onerous; they just needed to be done.

5. **Fascinate as many people as you can with the concept, especially senior managers.**
We spoke with our senior team the week after the conference in Paris, and they were duly fascinated. During the next few months, so were many others. Big ideas do that. It helped that we wrote brief introductions about the concept for different audiences (and tested and adapted these), developed brief slide presentations, and generally talked our heads off. We convinced our Head of School to sign our Project Charter for the “Practicum for All”, and also wrote to the senior nurses of our three Health Boards so they could sign, too.

6. **Don’t believe anyone who tells you, “It can’t be done because...”**
As with all QI, it pays to listen to dissenters as well as supporters, and turn their concerns into action. We were re-directed several times by what we learned, but there are a number of ideas about QI which have taken on mythical proportions. For example, pre-registration students can only attempt projects in clinical areas which have fully adopted QI methodology – keep it in the family, if you will. The general idea is that a bad experience will discredit QI for that student and that clinical area. We worked to prove this wrong. Our logic: If true, adoption of QI would (and will) proceed at a snail’s pace. But all clinical areas, in some sense or another, are now ready for QI. The trial we did with volunteers gave us reason to believe that a “can-do” mentality was even more important than upfront QI knowledge. The overall experience of our 230 students suggests a high level of receptivity in practice areas. We have (tentative) proof of concept, which we hope to confirm with further analysis.

7. **Keep students at the heart of everything you do.**
Our client group, our primary responsibility, is our students. In turn, we teach students to keep patients at the heart of everything they do. Our most fundamental theory, philosophy, and belief is that students learn more effectively by “doing” QI, with help from a theoretical underpinning. From the student perspective, we accept that this can provoke a great deal of anxiety. To help them overcome those fears and anxiety, we were open and available to students in person, by email, and by phone. In addition, we led a regular classroom Q&A. As a small team, this was pretty demanding, but doable.
8. **Think of the Practicum as just another assignment.**
We know how to do assignments. We know how to set them up, how to set the students up, how to fit expectations to a frame and timeframe, how to mark, and how to give feedback. The Practicum is a particularly complex assignment in its detail, so to turn it into “just another assignment,” we needed to do several things. We adapted the IHI Open School Practicum to the University of Stirling Practicum (with much of “IHI” remaining), required additional online and classroom preparation in the semester before the Practicum (e.g. a measurement workshop), developed and adapted extensive QI tools for students to pick “off the shelf,” and wrote an “exemplar” assignment, which was essentially a simulated test. The exemplar, in particular, led to some final significant changes to the assignment. And repeating “this is just another assignment” at times of stress helped prevent panic. Try it.

9. **Be patient, but keep your eye on the ball and keep moving.**
At one point, we were so busy we almost missed the opportunity to recruit students to test the practicum. “Just in time” is OK on purpose, but gets a bit scary if you lose awareness of the situation. On a university schedule, the cycle of events can mean you need to decide some things months, or even years, before they actually happen. And this is where planning, documentation, and attention to detail pay off. Keep good records, use action plans with short-, medium- and long-term objectives, and check progress against these. Keep meetings brief and to the point. Use email for agendas before meetings and to send action items (with owners) after meetings. Review quickly at the start of the next meeting. If something didn’t get done, ask why and figure out how to move on rather than wasting time on recriminations. Congratulate yourselves from time to time on how much you have done already. Movement motivates. Repeat: “It’s just another assignment.”

10. **Evaluate, learn, and adapt.**
Among all the pieces we got right, there have been many where we have been wrong — and still more where we do not know one way or another. Where we can, we measure (e.g., the pass rate and distribution of grades). And looking at case studies of different aspects of the practicum give us qualitative insights. Exploit every opportunity to learn. For example, we kept records of inquiries from practice areas and other informal feedback. Most of it has been positive, with interesting commonalities emerging. For such a complex intervention, more formal evaluation is essential, so we are conducting an extensive range of interviews with participants. We have a PhD student developing long-term evaluation strategies, including ethnographic and longitudinal studies. The evaluation is already shaping our future. Because of it, we can confidently say: “Watch this space!”