



# Quality Improvement Using Lean and Six Sigma Processes

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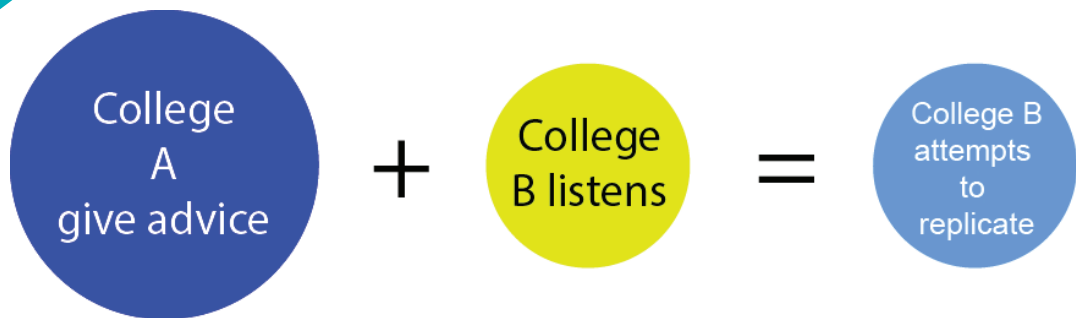
Danny Ridgeway  
Principal, Bexley College

Tim Eyton-Jones  
Principal, John Ruskin  
College

# Introduction

## Overview and background to project

One of the key findings in the 2012 Efficiency and Innovation Fund (EIF) evaluation report: 'The many faces of collaboration'<sup>1</sup>, was that there was a new and effective arena for quality improvement in FE. In the past, good-practice sharing could be described as:  $A + B = A$ .



College A tells College B what it does. College B attempts to replicate College A's advice. Through open, frank and detailed collaboration, however, a new formula for the sharing of good practice emerged:  $A + B = C$ .



Here, 'C' represents innovation. This 'third way' is discovered through the 'wholesale pooling of issues and ideas amongst determined, open-minded organisations'<sup>1</sup>. It's not about accepting the ideas of an external sage, but about identifying and agreeing a common, aspirational outcome then objectively looking from different standpoints at how best to achieve it.

In this case study, we return to look at the longer-term impact on two of the Colleges involved in the Lean and Six Sigma improvement project: Bexley College and John Ruskin College. The process by which they came together with Bromley College, and the early gains they made, were all well documented in the group's first case study<sup>2</sup>. In this follow-up, we'll be asking: was it worth it, are they still working together, and would they recommend their journey to others?

<sup>1</sup> Davis. T (2011) Efficiency and Innovation Fund Shared Services Evaluation Report: The many faces of collaboration. AoC. Available at [http://www.aoc.co.uk/shared\\_services/material/reports](http://www.aoc.co.uk/shared_services/material/reports)

<sup>2</sup> Davis. T (2012) Quality improvement using Lean and Six Sigma processes. AoC. Available at [http://www.aoc.co.uk/shared\\_services/material/lean\\_six\\_sigma](http://www.aoc.co.uk/shared_services/material/lean_six_sigma)

## Progress since November 2012

Like most people who come across the enigmatic phrase 'Lean and Six Sigma' for the first time, Danny Ridgway, Principal of Bexley College, wasn't exactly clear what it involved. It was Sam Parrett, Principal of Bromley College, who asked Danny Ridgway and Tim Eyton-Jones, Principal of John Ruskin College, if they would be interested in using the approach to collaborate on the scouring of their provision for improvement themes.

As with most shared service projects, the journey involved three broad stages:

- Stage 1:** debates about the aspects of provision to explore
- Stage 2:** process mapping of the chosen aspects, then
- Stage 3:** process re-engineering to improve quality and efficiency.

The formal shared services projects, such as Transforming Education in Norfolk, set up limited companies wholly owned by the partners to provide centralised back-office services. The 'Lean Six' group, however, had no long-term plans for closer partnership working. So twelve months on from the end of the project, are they still working together?

**"It took a few months to really get under the skin of what it actually was"**

"To be honest," says Tim Eyton-Jones, "the partnership working hasn't progressed since we formally ended the project. The areas we focussed on (enrolment, fee collection, payroll and student services) have gone from strength to strength, but we're no longer working together."

"It took a few months to really get under the skin of what it actually was," says Danny Ridgway. "We had workshops every two or three weeks to process-map the aspects we were focusing

on. It was an iterative process – we understood more as we did more." However, with hindsight, for Tim Eyton-Jones, the methodology was overly complex. "I think we're a little bit more astute now as an organisation on how to look at and improve our processes. I don't regret going through the project as it was a very important learning experience and helped us a great deal to crack some of the big issues we had at the time."

Tim Eyton-Jones agrees with Danny Ridgway that: "It really helps you to think differently when there are people in the room who are already working in a different way. The process of examining an issue is definitely where creative thinking starts, but it did cause quite a bit of stress amongst the staff who were taking it forward."

## Impact on the organisation, staff and students

For Bexley College, the Lean Six approach has begun to take root in its quality psyche and has recently been used to examine the provision of additional learning support. "We were keen to stop learners being passed from pillar to post," says Danny Ridgeway. "We wanted to make sure they understand all of the opportunities available. We've also used it to look at our business planning process and the consistency of information across our key communication tools: website, prospectus, course information... It's helped us identify, and begin to solve, the gaps in the chain."

**"Using Lean 6, we got it right first time"**

As an advocate, Danny Ridgeway also sort to test out his team's expertise by helping the local Bexley Adult Education College reinvent its fee-collection system. The gains Danny Ridgeway's own College achieved in this area were significant, and he was delighted that when his partner used Lean Six on the same process, its system improved and the amount of uncollected fees was reduced.

As the paradigm in which we work continues to change, particularly around the funding of adult provision and associated fee collection, Bexley College decided to reapply the Lean Six approach to see if it could make further system improvements and efficiency gains, and to try to ensure that any new systems they introduce avoid unnecessary mistakes.

"We've now got Advanced Learner Loans for over-24s on Level 3 courses," says Danny. "So we went through the whole process of how a student would apply for a loan and where the pitfalls may be. The result was that unlike many other Colleges, we hit our target, and indeed we now want to increase the loan facilities we can offer. Using Lean Six, we got it right first time."

Danny's team also relooked at enrolment. During the collaborative phase of the project, the three teams had concentrated on the September enrolment period. "We wanted to increase the amount of time staff had for thorough and supportive IAG (information, advice and guidance) in September. So we looked at the process we needed in order to confirm which of our current students would be progressing on to another year with us, and how we could complete their enrolment early - in June. The result is that it's not just made time for the IAG, it's reduced the September queues and so reduced the need to pull staff away from their normal preparations for the start of the year."

Whether the task is large or small, the Bexley College team are keen to keep using the approach. Here are some of their examples:

**"There's now less people to get involved in the circus"**

- The prospective childcare learners with conditional offers now begin the enrolment process early so that, if successful, their CRB checks can be completed before the start of term.
- Student Services, which previously saw course enquiries, interviews and enrolment in separate teams, has now been brought together. States Danny Ridgeway: "There's now less people to get involved in the circus."



## Planning for quality

The Bexley College team is also looking at how Lean Six can be used to prevent issues from developing.

- ‘How can the Lean Six approach help us evaluate new software options for our payroll system?’
- ‘How can we use it to minimise the impact of the move to our new site next year?’

In a more subtle twist, the degree to which service aspirations have now been articulated means that quality can be improved ‘mid game’ rather than at the end of the academic year. For instance, the enrolment team can continually monitor its performance against its aspirations and make changes straight away if it is not achieving its ‘gold standard’ service.

## Savings and growth

That there has been service improvement in both Colleges is in no doubt, with many quantifiable examples given in the original case study<sup>2</sup>. That both partners have grown is in no doubt: Bexley College is increasing progression from Level 2 to Level 3 and hitting ambitious 24+ loan targets; John Ruskin College is growing overall by 10%. However, both Danny Ridgeway and Tim Eyton-Jones agree that it’s very difficult to single out a specific action and identify its direct impact on the bottom line. What is clear, though is that if you focus hard on resolving specific issues with the learner’s journey, you’re more likely to improve outcomes, reputation, and future enrolments - and see even greater savings as a return on your investment.

## Replicability for the wider FE Sector

To help the sector evaluate the experience of using the Lean Six approach, a comprehensive tool kit is available<sup>1</sup>, covering:

- an introduction to Lean Six Sigma;
- preparation and management of Lean Six Sigma projects
- process mapping;
- staff training.

Tim Eyton Jones adds a word of caution, however: “It should definitely be used sparingly. It’s particularly useful for looking at areas that need re-engineering, but it should be used in conjunction with other improvement strategies. Too many Colleges fall down by embarking on just one strategy.”

So it seems that the Lean Six Sigma improvement model is not about incremental improvement, but reinvention:

$$A + B = C$$

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<sup>1</sup> South East London Colleges Lean Six Sigma Toolkit. Available at [http://www.aoc.co.uk/shared\\_services/material/lean\\_six\\_sigma](http://www.aoc.co.uk/shared_services/material/lean_six_sigma).



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