

A regional building contractor used CLIP to improve productivity by altering the way they approached a project



New student accommodation at Keele University



Newly installed kitchen unit in block 5



Programme and progress chart for the Keele site

By using CLIP...

‘We have reduced the time it takes to refurbish a room by 12%, and all snagging by 69%.

The overall quality of work is of a higher standard’

THE PROJECT

Refurbishing student accommodation, Keele

CLIENT:

Keele University

CONTRACTOR:

J & S Seddon (Building) Limited

Barry Thompson of J & S Seddon (Building) Limited tells how using CLIP helped them to improve productivity and reduce defects, by changing the way they planned and managed their projects.

VIEW FROM THE CONTRACTOR

Background to the project

We are part of the Seddon Group, operating throughout the West Country, Midlands and Wales. We undertake anything from multi-million pound design and build projects through to long term maintenance contracts.

We place a big emphasis on partnering with our clients on all our projects. This enables us to meet their needs more effectively and build long term partnerships.

What attracted us to the CLIP programme

I heard about CLIP when I attended a Best Practice Club meeting in Wolverhampton. Another contractor talked about the productivity improvements they had made, so we invited the CLIP team up to give us a presentation.

Seddon is involved with a number of long term partnering contracts, and we recognised that CLIP could become a real benefit to the company. We decided to run a pilot project to see what gains we could make.

What our aims & expectations were

We are involved in a long-term partnership with Keele University, where we are refurbishing their student accommodation. The rooms are in blocks of between two and 10 storeys, and are of a traditional brick & block construction.

The main aim was to save costs, and improve our level of service to the University. We also wanted to reduce the amount of overtime that we worked on the project.

Other expectations included:

- Generating a detailed programme of activities covering phases of the project
- Improving communication by developing a visual management board to track progress
- Including sub contractors in the programme early on, and improving team work.

How the CLIP process worked for us

We started by involving the whole management team in a one-day ‘pre-diagnostic’ workshop with the CLIP engineer. This involved discussing the problems of snagging and delays encountered on the previous phase of the work.

The majority of the team were positive about CLIP from the start, as they could see the benefits, but we needed to work harder to convince some of the site team. The problem was that no-one was planning up-front the sequence in which each activity should happen, and how the work should flow through the block of rooms. The team ‘process-mapped’ each part of the refurbishment programme, and it quickly became obvious that we needed to rethink how and when we carried out each activity.

‘The first thing we do now is to ask ourselves; is there anything we have learned from the CLIP ‘Masterclass’ that we can use to benefit this contract’

Barry Thompson
of J & S Seddon (Building) Limited

Another issue was a lack of communication between the client and the rest of the team. On the last project we lost five weeks, because we did not know about asbestos in one of the blocks.

Our CLIP engineer ran 15 ‘Masterclass’ days, where we looked at new ways of working. We involved the trade subcontractors who all made positive contributions. The whole project team now meet together on site once a week, to communicate the next four weeks plan, and to discuss in detail the tasks for the week ahead. This ensures everyone on site knows what everyone else is doing, and allows the communication of health & safety issues. This meeting is held around our visual management board in the site office, which displays all this information.

We filmed one of the floor layers in action to see where we could spot inefficiencies. We did this by performing a ‘7 Waste analysis’ on each part of the process. As an example of the detail this could show – we noticed that there was a danger of the floor layers’ fingers getting trapped when they were

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working near the doors. So, we immediately put up signs outside the doors reminding people to knock before opening them.

The video allowed us to come up with a best practice routine for floor laying. We followed this with a half day training session with the team to introduce the new method of working.

How we benefited from this initiative

By changing the way we plan our work at Keele, we have reduced the time it takes to refurbish a room by 12%. Also, no-one on this phase of the work has worked any overtime.

We have reduced floor snags by 80% per room, by ensuring everyone follows best practice methods when laying floors. We have reduced all snagging by 69%, and the overall quality of work is of a higher standard. We expect to make further improvements in productivity throughout the remaining five years of the contract, by continuing to analyse our processes.

The biggest benefit is that CLIP makes everyone ask if there is a more efficient way of doing a piece of work. This helps drive improvements, and encourages a ‘zero defects’ culture.

How we plan to use the skills & lessons learned

The whole Stoke office is now using the tools and techniques applied at Keele University on other projects, and we are introducing the ideas to our other management teams.

We now involve the client early on in our projects, as it gets them more involved with the whole process This will help to improve our partnering arrangements.

Our mindset towards our projects has changed too. The first thing we do now

LEARNING POINTS

- Involve the whole project team in a weekly site meeting to communicate the plan for the next month, and to discuss in detail the tasks for the week ahead.
- Use a video to film site processes and come up with a best practice routine for carrying out an activity. Follow this with a training session with the team, to introduce the new method of working.
- Develop a way of capturing tools and techniques used on a project so that they can be used elsewhere in the company. Start by introducing these ideas to other management teams to get their buy in.
- Develop a visual management board at the site office, which tells everyone what is happening on site and what improvements are being made.
- You may need to work hard to communicate the benefits of CLIP to the whole team. Get them involved from the start, so that they can see the benefits early on in the process.



The team maps out the project sequence

is to ask ourselves if there is anything we have learned from the CLIP ‘Masterclass’ that we can use to benefit this project. I would encourage anyone to give CLIP a go.

JARGON BUSTING BOX

■ **7Ws – look for seven wastes that can never be added value:**

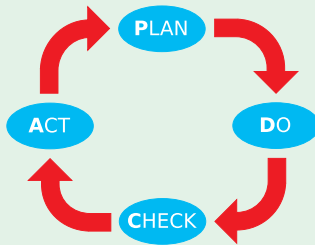
- Motion ■ Transport
- Waiting ■ Overproduction
- Defects ■ Unnecessary inventory
- Inappropriate work or processing.

■ **5Cs – check these to lay the foundations for continuous improvement:**

- **Clear out** – separate the essential from the non-essential
- **Configure** – a place for everything, and everything in its place
- **Clean & check** – assess the current condition of the environment
- **Conformity** – ensure standard easily maintained
- **Custom & Practice** – ensure everyone follows the rules.

■ **THE PLAN-DO-CHECK-ACT (PDCA) CYCLE –**

a way of thinking which encourages continuous improvement



■ **THE CLIP – ‘standard structured approach’ – which is made up of four main stages:**

- **Pre-diagnostic** – setting the aims and training the team in lean tools and techniques
- **Diagnostic** – practically applying the tools to analyse the situation
- **Improvement activity** – looking at the data for opportunities to improve processes
- **Follow up** – identify barriers to success and set improvement actions in place.

■ **VISUAL CONTROL –**

a major part of the CLIP process is to use visual tools to display data, highlight improvements and record ideas. These include:

- **Key Performance Indicators** – are the measure of performance of activities that are critical to the success of an organisation
- **Pareto Chart** – a comparative bar chart that shows the number of defects for each chosen area of work, and the cumulative total of defects over the whole project
- **Fishbone Diagrams** – are used to identify the possible causes of problems. Start by defining the problem to be investigated and write it down. Then draw lines (bones) to represent each cause that runs into it. Finally you can brainstorm what is actually the cause of the problem
- **Priority Matrix** – a quadrant chart used to prioritise which improvement areas to focus on first. For example, you can place activities that will have a high impact at a low cost in one quadrant and focus on these first.

GETTING HELP

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