



Learning Last Planner[®] on a project

There are at least three learning pathways for those who want to implement Last Planner¹:

- Self study
- A generic one-day introductory workshop
- A tutored and facilitated development programme applied on a live project.

I don't know anyone who has successfully implemented the whole of the Last Planner System just from reading. In part this may be because ideas about and the theory underlying LPS are still emerging and there is as yet no definitive description of the current state of LPS. It may also be because we have a tendency to fit everything we see into the way we currently think and so we cherry-pick the things that appeal and leave aside the things we find too tricky, don't like or don't understand.

Individuals have successfully implemented Last Planner after attending a one-day workshop but they are few. It is a challenging task for the last of the reasons given above.

In response to this a number of consultants have developed a facilitation and coaching approach that gets a project team up and running with Last Planner. This note outlines the latter approach.

What distinguishes Last Planner from other project management approaches are:

- A systematic approach to the making and keeping of commitments (or promises)
- Collaborative programming or Reverse Phase Scheduling
- Making tasks ready
- Collaborative weekly (or daily) work planning
- Continual improvement through monitoring reasons for early or late delivery, PPC and a small number of other metrics²

Coaches work with the total supply team³ to develop skills and understanding in all four of these areas.

Action Learning

The Facilitation takes place in the context of a Project Initiation Workshop, MakeReady meetings, Weekly Work Plan (WWP) meetings and

¹ Last Planner is a registered trade mark of the Lean Construction Institute www.leanconstruction.org. LCI are happy for construction companies to use Last Planner to improve the reliability and predictability of project delivery. The Institute wants consultants who deliver training in Last Planner to construction companies to have a minimum level of skill and knowledge. For more information see the last page of this document.

² For a brief outline of the benefits and features of Last Planner read *Last Planner – an overview* available from www.thechangebusiness.co.uk/TCB/downloads

³ The team is assumed to include at least the main contractor's site and project staff, the trade foremen & contracts managers from at least the first tier suppliers & sub-contractors &—if possible—the design team leaders and the client.

project reviews mid-term and for Lessons Learned at the end. Coaching can happen in the context of all of these and in one-to-one meetings on and off-site and by telephone and e-mail.

The benefits of the Facilitation and Coaching approach are that learning is immediately applied to a specific project; the whole of the Last Planner System is rolled out systematically on the project; the whole supply team learn together – team members share the same training; there is a systematic evaluation of the project and of Last Planner.

An additional benefit is that it enables the team to identify where detail process improvements will be most beneficial.

Getting started

Study Action Teams™ (SAT)⁴ are a great way to kick start a lean transformation or a larger project because they help align aspirations.

SATs use other people's learning – often in the form of a book – as the basis for getting a team to think about what they do, what they want to be different and developing a strategic change agenda.

Project initiation

The purpose of project initiation is to:

- Prepare the team to work together on this project
- Develop a broad understanding of the challenges that this project presents and how we will overcome them together
- Agree the programme of work
- Begin the process of making work ready to be done
- Plan the work for the first week on site

Project (or, on larger projects, phase) initiation will generally take a day, sometimes two. It will involve at least:

- General introduction to the project, the client and to Last Planner
- Collaborative programming/Reverse Phase Scheduling
- MakeReady meeting
- WWP meeting

With a new supply team it might make sense to begin the process with a half-day *introduction to lean construction* or a Study Action Team to create a shared understanding of the principles underpinning lean.

Deliverables from project initiation

- Agreed master programme complete with risk analysis
- Agreed milestone programme with risk analysis
- Agreed programme for the initial phase(s) – or for the whole project on shorter projects – with risk analysis
- Initial MakeReady analysis
- Initial weekly work plan WWP
- Agreed dispute resolution procedure (if not covered by existing contract)
- Agreed date for site logistics planning meeting (if required)
- Agreed days and times for project MakeReady and WWP meetings

⁴ Study-Action Team is a trademark of Lean Project Consulting, Inc. www.leanproject.com you will find a little more at www.thechangebusiness.co.uk/TCB/Study_Action_Team.html

After the workshop

It is helpful to capture the post-it programme so that it can be reproduced in a more manageable form. MS Excel is well able to do this and is readily available to most members of the supply team.

Working with Excel in this way enables you to cut and paste tasks with about as much ease as moving post-it notes on the original, for example, when you discover that mistakes have been made.

Programme compression

The purpose of *programme compression* is to reduce the length of a programme. This can be done before the project starts on site or once you are on site in the event of a client requirements changing or delays in the early part of the programme.

Why compress programmes?

The Boston Consulting Group suggests that companies that can offer a time advantage *achieve three times the growth rate and twice the profit margin for their industry*. What would it be worth to your customers if you consistently deliver projects 20% faster than anyone else at no extra cost and to higher quality?

This is an opportunity to pack the activities tighter, to reduce batch sizes and to remove padding from each activity in an existing programme.

Follow ups

A crucial part of the *project initiation* process [and any *programme compression* process] is a follow up meeting with each supplier. Coaching and/or facilitation is possible for these meetings.

The purpose of the meetings is to:

- Check the agreed programme
- Agree ways to handle particular risks
- Explore all the issues raised by the supplier and that affect the supplier
- Confirm the supplier's *handover requirements* for each task or group of tasks using the *handover requirements form*.

Meetings take place as soon after the project initiation or programme compression as possible. If there is a compression workshop planned it is vital that the follow up meetings be completed in advance so that any potential blocks are removed and handover requirements data is available.

On site coaching

Once the project is on site support continues in the form of coaching to site staff engaged in *Making tasks ready* and *Weekly Work Planning*. Initially on a weekly basis this tails off as skills and competence grow.

Project reviews

To check that all is on track and to enable fine-tuning of the Last Planner system for the project we encourage clients to conduct mid-project reviews. The end of project review is the key opportunity to look at all the lessons learned and to decide how to share them with the rest of the company and with the rest of the supply team.

Elements of project-based *learning Last Planner*

We suggest a programme using some or all of the following for learning Last Planner in this way.

Element	Minimum suggested times
Project Initiation Meeting	1-2 days
Programme compression	1 day
Excel programme preparation	Coaching
Follow-up meetings	Coaching for 1 or 2 days
Project logistics meeting	1 day
MakeReady and WWP coaching	Weekly for first month Fortnightly for next 2 months Monthly thereafter
Project review meetings	At one third and two thirds way through the project.
Lessons Learned review	At end of project.

In this way all the supervisory staff engaged in the project learn the key elements of Last Planner and experience it working on a project in real time. The review meetings ensure that the learning about last Planner is captured and can be shared with other projects & within the supply team.

Selecting a consultant to work with

The Lean Construction Institute (LCI) www.leanconstruction.org are pleased when owners, clients or their construction companies use Last Planner® to improve their design and construction performance. They make no charge for this and place no limits on its use within a company. They do encourage companies that find it useful to become contributors to the Lean Construction Institute.

LCI do retain a Trademark on the term and Copyright in the idea and materials to prevent people who misunderstand or misrepresent the system from using it in trade. Because they want those who design and construct with the help of the Last Planner® System to have the best possible start, LCI do require that those who use the term in trade are approved. That is, those offering to teach, coach or apply Last Planner™ as part of a commercial offer need LCI approval. LCI also expect trainers, facilitators, coaches and consultants to:

- § make financial and other contributions to the Institute in recognition of the financial and other benefits they are getting from the work we have put into developing Last Planner.
- § be members of the Lean Construction Institute in the US or, where a branch exists, in their home country.

If you want to become an approved supplier please contact Greg Howell, ghowell@leanconstruction.org.

For details of approved consultants please refer to <http://www.leanconstruction.org/lastplanner.htm>

About the author

Alan Mossman is a socio-technical systems consultant specialising in helping people in projects & organisations make a lean transformation. He is an approved LPS trainer and is responsible for developing new consultants in the UK. Find out more at www.thechangebusiness.co.uk or contact him at consultancy@thechangebusiness.co.uk