

Episode 196

Why communication is central to self build success - with Lucy Pedler

The show notes: www.houseplanninghelp.com/196

Intro: As with any enterprise, poor communication can cause many problems during a build. If you are aiming to use environmentally sound techniques and materials it can be doubly important to make sure everyone's on the same page. Lucy Pedler, founder of The Green Register, has 35 years' of expertise in architecture and the environmental impact of building materials and systems. She talked to us about the importance of good communication throughout a self-build project. I started by asking Lucy to tell us a bit about herself.

Lucy: I'm an architect. I qualified about thirty-five years ago.

I decided to go into the architectural professional because I was very interested in sciences as a child and suddenly at 16, I realised that there was a whole other world out there, which was the arts, and wanted to combine a profession that did both. However, there aren't very many that do that. So, architecture was one of the ones that really combined them both. That's what I love about the profession, that it's arts and sciences.

I was at the Palace of Knossos on Crete with my mother when I was 17, and realised that's what I wanted to do.

Ben: How did it develop into green building and going down an eco route?

Lucy: My parents were both doctors. My father, however, was an environmentalist. He started writing for Doctor Who; he invented the Cybermen. He then got into the idea of the environmental world and he wrote a series, Mind Over Matter, about how human activity can interfere or destroy parts of the environment.

We were brought up in that sort of environment, in that we were always told about our effect on the planet.

Ben: The Green Register itself, why was it setup and what does it aim to do, ongoing?

Lucy: A little background to that in as much as, because I have a passion for the environment, my aim was to try to find a career where I could do my architecture and my environmental work.

I took a side-step in the early '90s, where I worked for the UK's first Environmental Building Centre in London, and we trained other construction professionals in green building. But I realised that there was a huge gap with construction professionals, where they could get independent information. Lots of manufacturers would come and give me a free lunch, tell me how wonderful their product was, but there were very few independent training providers.

So, that's what I wanted to do. I wanted to set up a training provider that was trustworthy. And that's where the Green Register came from.

Ben: How has it developed over the years?

Lucy: We're now into our 18th year. We're not-for-profit. We survive on a shoestring, but that's intentional because what we want to do is to be able to tell it how it is. So, we don't have any grants or external funding apart from the odd sponsorship.

We provide independent training and we have done it throughout the country. In fact, once we went to Gibraltar. That was our one and only international gig.

But it's going very, very well and I've always said that when our job is done, the Green Register will no longer exist, but we're still a ways.

Ben: When I had an initial chat with you, you were very keen to promote communication in our self-build projects. So, where shall we start with that? What is communication?

Lucy: I think lack of communication is probably easier, in as much as that pervades our whole world, in our personal life and professional life. Lack of communication is, I think, at the core of a lot of problems, whether it's between a partner, a child, a work colleague or in my professional life, between the team members. Lack of communication causes most of the problems, I believe.

I make it my point to be a clear communicator. Some people think I'm quite direct, but at least there's no grey area. When I'm working

with other people, they know where I stand. And I think that's helped to provide a clear route to building a building.

Ben: So, that's one thing we can take away straightaway. Don't beat about the bush, don't sugar coat it, just say it clearly, as it is.

Lucy: Yes. One has to be tactful and thoughtful and choose words carefully, but we spend quite a lot of time as human beings, not saying what we think. If that's on an emotional level, that's one thing, but when you're in a professional environment, not being clear is what creates problems.

Ben: We're talking about a lot of people on a project. So, are some people more important than others; for example, the architect, contractor, if we're going down that route, client – is that the core of the communication? How do we make it work with so many people?

Lucy: It's an interesting question because when I trained, the traditional form of contract was the normal route to procurement. So, the architect was seen as the lead consultant. We coordinated everybody else's work.

It seems egotistical, but we were seen to be the lead consultant. So, it was our job to make sure that all the other consultants did what the client's brief asked for.

We've been demoted in many ways. I think it's a shame and there's lots of other routes to procurement now, but I think that's a long answer to saying, actually, everybody is important.

Ben: How do we make sure everyone is involved then, when there is a lot of information flying around?

Lucy: I think one way to do it would be to have a very well-written brief.

So, right at the beginning, the architect, the designer or whoever it is who's going to manage the job, gets a very deep understanding about what the client wants, writes it down and reviews it.

That's a document that should be referred to throughout the process because inevitably things change. There may be planning issues, historic conservation issues, cost issues, design changes and so on. If you can always have a document that you refer back to, if something changes then you can explain to the client the repercussions.

Say, for example, they find a gas line underneath the site. It's very usual because that's usually very well documented, but something

unexpected. That will affect the cost, it might affect the foundations, it might affect the arrangement of rooms and so on. So, it's better if you have something to go back to, to say, 'this was the cost, this is what our aspirations were. Because of this, we're now going to have to change it. This is the implication. This is the time implication, the cost implication, the design implication.'

If that brief is very robustly written, I think that's a very useful document to use throughout the process. Not just initially, it's there to guide you throughout.

Ben: Does it ever get forgotten? I know this with my goals for the year. Sometimes I start in January and think, 'I've got these things I want to achieve' and they get lost on a computer if I'm not very, very careful. So, are some people better than others in actually referring to this brief frequently?

Lucy: Unfortunately, it's become a very litigious environment. Construction professionals have to be a lot more protective about themselves, covering their rear ends. So, often we have a paper trail that can prove all sorts of decisions that are made along the design process. So, a competent construction professional would have that and would be able to have a record of what was decided.

Ben: Let's dig in to the brief then. I know they're often slightly different. What do you like on the brief? What are the key elements?

Lucy: From my point of view, I do low energy and sustainable designs. So, I would like to tease out of the client what it is they want.

If somebody comes to you and says, 'I want a low energy house,' that might be simply because they want low bills. That's very different from a Passivhaus for example, although that is concentrating on energy, where it's to do with the bigger picture about materials, wellbeing, internal environment, light and so on.

From my point of view, and I see everything through green-tinted spectacles, I would want that to be the primary motivator for a brief.

But also, the client might think they want five-bedroom houses, actually they only need three, but it would be a better design, or they think they absolutely have to have solar panels, where actually a fabric first approach would be a lot better in terms of environmental issues and environmental impact.

So it's a lot of work upfront, which is worth it because you'll reap the benefits throughout the process.

Ben: You've said a lot of interesting things in that answer. Let's rewind to one of them. Setting this green agenda, or I come to you and I say, 'I want an eco-home,' it's such a tricky thing.

I always think that I've done a fair amount of research here and still, I've probably got it wrong. The Passivhaus, I think, was a great thing to put on there, but because of budget constraints and maybe the speed that things go, lots of little things, maybe I'm not building it out of as good materials as I would like to be.

There are just so many different things to consider that sometimes you have to focus on one. Is that a good approach?

Lucy: Absolutely. You've got to be realistic. The majority of people don't have the money to do 100% sustainable buildings.

Passivhaus is a fantastic standard. It does concentrate mainly on energy, so natural materials isn't at their core, although they are talking comfort and internal environment. So, you want to have low VOCs and so on.

But don't beat yourself up if you haven't got the perfect house because whatever you do is going to be better than the average house in the UK, which is very, very mediocre. There's a design mediocrity and then there's a sustainability mediocrity too. We're not anything like most of our European neighbours.

Ben: Going back to our brief for a moment, when we put money on there, this again has been something on my project that has been quite tricky because we put a budget on there. Are you nine out of ten times wanting that budget to be the exact figure that is used?

In our case, we've discovered that we're going to have to go past that. It's going to be a choice and we've done the value engineering that we want, but if we're having this anchoring document, how important is what we put on there in financial terms?

Lucy: That's why it's so important to have a robust brief.

I don't think, in my 30+ years, I've ever worked on a project where the cost doesn't change, and it's usually in an upward direction. But then you go back to the brief and say, 'unfortunately, we've got a £10,000 extra cost that was unexpected. Do we increase the budget? Do we take it from somewhere else? How can we manage it?'

That's why having that robust brief really can guide your decisions throughout.

I think with self-building and with any kind of house building where it's your own project, from an architectural point of view, it's a lot easier to have that conversation because the occupier or the client is going to be there for a while. So, they can see the long-term benefits of adding, say, 100mm extra insulation because they know in the long run, energy costs will be down, and you'll be able to save money that way. The payback is quite short.

What I find in other aspects of architecture in commercial development, is because people are speculating or they're selling on, there's no interest in the long-term building. And so it's much more difficult to have that conversation about capital costs compared to running costs. But in residential, it's usually a lot easier.

Ben: Before we move off the brief, although I have a feeling we'll come back to it, other aspects again. Have we mentioned the main ones? Is there anything else we should talk about on the brief before going through the rest of the construction process and seeing how it relates to it?

Lucy: I think if the client is new to this, which generally they are, the architect or whoever is the main lead person would do well to explain to the client what the process is, so that they can manage their expectations. It will probably go over cost, it will probably go over time, but if you manage your client's expectations, they're less disappointed. Maybe give them a slightly longer period of time than maybe anticipated.

Ben: Timescale, yes. That has happened.

Lucy: Yes. If they're going to be extending and living in the house, explain to them exactly what the implications of having builders on-site are, and just going through the process with them, being clear about what's going to happen.

As an architect, I am very used to that process. Most clients aren't.

Ben: It's difficult, isn't it? To then remember what it was like when you didn't know. There were surprises as I went through it as well, not realising the first question I was going to be asked was, 'what build route do you think you're going to go down?'

You talked about this at the beginning. I was thinking, why is that the first question I seem to be asked by all of the architects?

Lucy: I would say this, but that's why it's really good to have an architect. There are some who feel that an architect is a luxury and you can

just get a competent builder to do a building. I'm sure there's plenty of buildings in this country that have been built by competent builders.

Having an architect gives you that extra level of in-depth experience. Not only is the design going to be better, but the experience of working through projects, working with other consultants, working to time and cost constraints, that's a real added value that an architect can bring.

Ben: Let's try and dig in a bit more to the construction process.

There are going to be a few different methods of technology that we communicate. Are there common ones? Email I can think of, phone, one-to-one, face-to-face – not that that's a technology – plans. Any other things we should be adding here?

Lucy: In terms of means of communication?

Ben: Yes.

Lucy: I remember when the fax machine first started and thinking that was just revolutionary, that I could sit in my office and send something to the contractor and they would have the detail within a minute or so.

That's all very good, but what it does is it sets up an expectation that everything can be done immediately. So, with the rapid communication methods that we have now, I think there's something lost in not being able to think and consider things.

If you get an email from somebody saying, 'I need to know this by five o'clock today,' you could probably do it, but it might be better if you said, 'I'll do it by tomorrow' because it gives you time to think things through.

Some decisions are quite quick to make, and electronic media is very good at that. And again, that might be something that would be explaining to your client, that there are some things that take a bit of time, and it's better for it.

Ben: Are there times when one-to-one communication will definitely be needed or these days, can you go through a whole project remotely, on the phone?

Lucy: I suspect you can. I wouldn't want to do it personally. I find face-to-face discussions hugely valuable. I think it's something like 80% of communication is non-verbal. So, you can sit in the room with your

clients, you can see their facial expressions, you've got the plans in front of you, you can sketch over them.

It's a very visual thing, our profession. Although one could probably do that on Skype, hold the drawings up to the screen, there's huge value in face-to-face communication.

I'm sure that there are projects that get done that don't have that, but I wouldn't like to do that.

Ben: Can we walk through a few more stages of designing the house, firstly, and then moving into the construction phase and what types of communication would be needed and when?

Lucy: The first thing after the brief is to start sketching out some very loose drawings. And most architects, I would think, would agree that you'd probably have a few ideas that you'd want to present to the client, so that they can choose the one that suits their needs most.

I still work in hand drawings, but there's lots of very good CAD programs as well, where you can very quickly get a conceptual design together.

You'd then have quite a long meeting with your client, just to bash out some of the basic things. Like, 'I definitely do not want a living room over there' or 'the kitchen's got to be much bigger' or 'I can't have my son's bedroom upstairs because of something or other.'

That again is a really key stage for communication. And keeping it loose, not presenting the client with a fait accompli, so that they feel involved and they can make their input then.

Ben: Have you ever had situations where you feel clients are holding information back? I say that because there's so much iteration that goes on, that sometimes you think, 'oh, I don't want to say something again.'

Lucy: Not holding back. I think the frustration I've had over the years with smaller residential work is the number of versions of, say, a bathroom one can do. I had a client who had a two by two metre bathroom and we went through ten different designs for that bathroom. And quite honestly, we came back to the original one in the end.

That sounds like I'm intolerant, but actually, it's time that the professional has in going through those iterations and that is a very common area of poor communication where the architect doesn't

say, 'I can do three design changes and then I have to start charging you extra.'

The architect always wants to be the good guy. We always want to be the yes person, trying to give the client what they want, but there's time involved in every decision. So, that again is something that it would be really good to discuss with the client, 'we'll do three options. You choose the one you like, we can make some changes, and then at some point we'll have a design freeze. Minor changes will be fine but if there's a major change, that's going to be an extra cost in terms of professional fees.'

Ben: At what stage do you move on to that detailed design?

Lucy: When the client's happy really. It often doesn't take very long if you've had a good discussion with them at the front.

There's only so many ways you can skin a cat in terms of designing a house. So, if you're a skilled architect, that won't take too long to get that conceptual work. It's the detail that's going to take the time, in terms of materials, window placement, all the things that make the house gorgeous.

Ben: As a client, it can be difficult to understand your house at first glance. This is another thing that as an architect, you probably can look at a 2D plan and just get it all straightaway.

Are there any tips or any ways to understand what it is that's being designed, so that we don't have to make changes further down the line?

Lucy: The advent of CAD is fantastic. There's a programme called SketchUp, which is very simple, and it's fantastic because you can very quickly get a 3D walkthrough for your client.

Many people can't understand 2D drawings. Why should they? It took us seven years of training to get where we are.

Ben: And space, that's the other one.

Lucy: And space. So, getting a little 3D model on a computer is really helpful. You can walk through it and the client can experience light and height and changes in space and so on.

Also, when I'm sitting in a room with a client, I'll say, 'this house is so big, and this room is about twice as big as the one we're sitting in.' So, you can kind of imagine it in your own mind.

Ben: Technical design is next in the process. Still, this relationship, if we're going down the contractor route, which I know we've said is not always the way but it's the way that I've gone and so that will probably be my input most of the time, but that technical design, we're still dealing with our architect. It's really just client-architect.

After this, we're going to start bringing in more of a team, going out to tender if that's what we're doing. So, already the communication has really just been with a small part of the team.

Lucy: It has. I think that's where it starts to get a bit rocky.

When I worked in the States, there was a much higher regard for the contractor-architect relationship. Often, in the firms that I worked in, the contractor would be on board quite early. There was a high level of trust. So, the idea of going out to tender was less common, although it was still done.

What we often did was get the contractor in early and they would work with you from the conceptual stage onwards, which was absolutely wonderful. They can inform some of the technical decisions that maybe an architect wouldn't have the knowledge of, so that when you got to the point where you had to cost it, it was quite realistic.

Ben: Does it always work out though? Because like you would with an architect, you'd have to show your budget upfront, I'm assuming, so that they don't think they're wasting their time getting involved.

On that design and build approach, does it always work out or can the builder sometimes drop away? Or is it all built on that trust, of knowing we're a team that likes working together, this trio?

Lucy: It's the trust. It absolutely has to have the trust.

I've worked with several contractors I'd like to work like that with, and trust is absolutely key. Because if you don't have that trust, you are worried that the contractor might be inflating prices or not being clear about the process. There's something called Open Book where you see all the costs that go through the process. That can help too.

In a competitive tender, you can sometimes get a low cost, but the contractor might not have understood the drawings or might not be pricing accurately. So, although it might appear initially to be the lowest cost, at the end, they're clawing back what they need in order to make a profit.

If you've got a contractor upfront, that's great, because he or she is actually part of the team to begin with. They've got some ownership of it.

Ben: So, the same things can happen, that they can say, 'actually, this budget, it's not going to happen, creating this design. We can either make these tweaks to simplify it, make it smaller, or you're going to need more money to throw at it'?

Lucy: Yes. And actually, that's managing the client's expectations right up front. So, they don't have the illusion that they can afford everything when they can't. So, you can be realistic about the costs right from the get-go.

Ben: The construction phase then. This is when you're introducing a lot more people. On that point, because there's almost a chain of command, is it important that those people higher up have more effective communication, or are you going to try and level it all again and say that communication's important for everyone?

Lucy: I'm going to say communication is important for everyone. However, having said that, if the client can afford to have the architect or some project manager looking at it and managing the project throughout, that's a real plus. You have to have somebody who's going to have a higher overall view. That's what the architect used to traditionally do.

Unless you're experienced in the building industry, I would not suggest that the client does that. They're too close to the project – it's their own house – they don't have the experience and the contractor almost needs a third party, neutral person to work between the client and the contractor.

Particularly with self-build, it is often the case that you'll get the client much more involved. But we had a project where that fell down catastrophically because the client thought they knew more than they did and did a lot of, for example, purchasing materials themselves because they thought the contractor was creaming off a certain amount. Actually, the contractor needs that to run his or her business. And in the end, because the client didn't understand the critical path in that you have to have certain things at certain times, it delayed the project.

So whilst with self-build I understand the client's desire to be involved, there are certain things where it's much better for them not to be.

Ben: Unless you want to do it again, I suppose is the one exception, where you're going to learn the trade and you're going to make most mistakes the first time, but you'll learn.

Lucy: Absolutely, yes.

It's really good to have a neutral third person to mediate between the client and the contractor, I think.

Ben: Anything else in this construction phase? Perhaps things that go wrong? There is a lot that can go wrong and it can often be expensive to rectify, if the wrong information has been given.

Lucy: Yes, well, that's again about managing the expectations at the beginning, about explaining the building process, that there's likely to be some delays. We'll try and manage that as much as possible, but things do happen in building. So, not to put doom and gloom on the client's expectations, but just to say, this is how it normally works.

From an architectural point of view, that's an interesting phase for us because we're seeing the ideas getting built into practice. So, we're really excited and involved at that point. But for a client, it can often seem very slow, costs go up, time, budget and so on, all get delayed.

So, again, it's all about telling them what's likely to happen.

Ben: And it can be tricky as a client as well, when all these things happen. Obviously, we're the ones with the money. So, what if we do get into difficulty with money? Is that something we should bring into this relationship? In some ways, you always want to keep it to yourself, but is that going to explode on you later down the line?

Lucy: It's better to say what access to funds you have and what you have upfront, and not say, my budget is 10% less than it actually is. Because then everybody knows what they can afford.

If it really got to a point where they ran out of money, then the contractor would have to stop. That's actually very problematic because the contractor then has to go on to another job to keep their people employed, and can't then come back when the money's been found. So, if at all possible, avoid that.

But there are some stages where the contractor can stop. For example, they could do a complete shell, get the heating and hot water and so on in, and the client can over time fill out the detail. We lived in this house with a camping stove and a picnic table for

six months because we hadn't got the kitchen ready. That's fine. We had heating and hot water.

Ben: I guess there are certain times when you can do that. When you're watertight, you have a few more options than when the building is blowing in the wind.

What else should we be thinking about in terms of communication? Are there other things that you want to bring in to this conversation?

Lucy: If you were to, at the very beginning, say, 'we're going to have this many meetings and this is what the fee's going to cover,' I think that's helpful too, to tell the client and all the other design team, how regular the meetings are going to be, who's going to be there, who doesn't need to be there, where they're going to be, what's going to be covered, so that they've got some idea of the schedule of meetings and what's going to be described and agreed at that.

Ben: And these are meetings with the client? Or are they toolbox talks on-site?

Lucy: All of them. As much as possible, one would have a schedule of meetings. Of course, inevitably, there'll be other things too, but yes.

You mentioned toolbox talks. Those are really, really important when you're trying to get a low energy building.

The Green Register, which is the training organisation that I run, we try to help construction professionals understand how to build sustainably. The one group of people we find very, very difficult to get in our seminars are builders.

Ben: Why is that?

Lucy: There are a lot of reasons, and probably it'll take about half an hour to go through all those. But basically, I think it's because we don't have a robust enough approval system in the UK.

We've got approved inspectors and we've got building control officers who inspect the property as it goes through the construction process. And they don't have enough resources to check for airtightness, for example. So, things get through and we very often get a non-compliant building as a result.

Having the toolbox talks at the beginning – taking airtightness, it's a concept that many builders still don't quite get. And yet, it's not that difficult to build an airtight building. If one was just to get all of the building team for, say just half a day, and have a toolbox talk about

the details you need to do to get the airtight building, you would be far more likely to get an airtight building, just within a few hours explaining the concepts, looking at some of the basic details. It's money well spent, I think.

Ben: As we come towards the end, just a couple of thoughts. Staying on top of communication. I've found that a challenge sometimes, particularly when there's a lot going on. I have a young family, I have a business that I'm trying to run at the same time as looking at all these emails and trying to draw out the detail and chat it through with my wife and so on.

Is there any insight you can provide here on how to stay on top, or should this be the priority out of everything we're doing or does it just have to slip into life as much as we can make it just work?

Lucy: Obviously, some people choose to do self-build because they want to be involved, but building professionals are trained to do this work. Let us do it.

Architects, engineers and surveyors are trained to do this kind of work and to take that burden off of you. Obviously, there's a professional fee involved in that but...

Ben: But I'm doing the simplest way and there's still a heck of a lot of things that you have to be in the loop with.

There's actually a line of things that go over your head, unless you really want to drill down. Is this what you're saying, that some things you should just leave it to the professionals?

Lucy: Yes. It's easy to say, isn't it? But there are some things which you probably don't care about. Maybe you do, I don't know. The level of insulation, the detail around the window and so on, as an example. Those are the things that we're very well versed in, and unless you really, really want to know about it, perhaps just let them get on with it.

Whereas the type of flooring that you have or the ceiling height or something quite simple in a building would be something you'd want to have involvement in because you're going to be living in it.

Again, it's down to what the client wants, how involved they want to get. I think it's very easy to get more involved than you need to be. And I think as an architect, that's also a challenge, to want to include the client but not for them to get in the way.

Ben: As we move to the back end of the project, is there a sense of reflecting on it, with the communication? It almost may be going back to that brief again. Or is this a stage that in a self-build, actually, you move in to the house, the builders move away, they move on?

Lucy: I really enjoy that part because hopefully, you've got a successful project. You can look back at the brief and see what you have achieved, what has been changed.

At the Green Register, we encourage post-occupancy monitoring. Say, for example, you're trying to get an airtightness layer of a certain level or you're trying to get certain heat losses down to a minimum or certain fuel costs, look at it over a year. Get a bit of post-occupancy monitoring. The engineer, architect or perhaps the surveyor can do that. And hopefully, you'll be really reassured that you've got what you've set out to achieve.

I've done that on my own house and it's very reassuring to see that what you've worked on for so many months or even years, you've actually been able to achieve.

Ben: Any final thoughts? We've made this episode about why communication is at the heart of a successful self-build project. How shall we close this?

Lucy: If you have any doubts about anything, say so. Don't hold back. If you set the scene at the beginning where communication is the most important thing, hopefully you'll be creating an environment where everybody's comfortable talking about things.

If you're worried about something, if you're concerned that something is not going right – this is from the client, the architect and the contractor – say it. It doesn't have to be rude, but just say it.