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## OFFICIAL REPORT AITHISG OIFIGEIL

# Economy, Energy and Fair Work Committee

Tuesday 5 March 2019



The Scottish Parliament Pàrlamaid na h-Alba

**Session 5** 

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## **Tuesday 5 March 2019**

## CONTENTS

	Col.
DECISION ON TAKING BUSINESS IN PRIVATE	1
CONSTRUCTION AND SCOTLAND'S ECONOMY	2
SUBORDINATE LEGISLATION	43
Public Procurement etc (Scotland) (Amendment) (EU Exit) Regulations 2019 [Draft]	43
Public Procurement etc (Scotland) (Amendment) (EU Exit) Amendment Regulations 2019 [Draft]	43
EUROPEAN UNION (WITHDRAWAL) ACT 2018	48
UK Statistics (Amendment etc) (EU Exit) Regulations 2019	

## ECONOMY, ENERGY AND FAIR WORK COMMITTEE 8<sup>th</sup> Meeting 2019, Session 5

#### CONVENER

\*Gordon Lindhurst (Lothian) (Con)

#### **DEPUTY CONVENER**

\*John Mason (Glasgow Shettleston) (SNP)

#### **COMMITTEE MEMBERS**

Jackie Baillie (Dumbarton) (Lab) \*Colin Beattie (Midlothian North and Musselburgh) (SNP) \*Angela Constance (Almond Valley) (SNP) \*Jamie Halcro Johnston (Highlands and Islands) (Con) \*Dean Lockhart (Mid Scotland and Fife) (Con) Gordon MacDonald (Edinburgh Pentlands) (SNP) \*Andy Wightman (Lothian) (Green)

\*attended

#### THE FOLLOWING ALSO PARTICIPATED:

Liam Clark (New College Lanarkshire) Charlie-Jade Combe (Edinburgh College) Alasdair Hamilton (Scottish Government) Lorna Hamilton (Association of Women in Property) Asher Humphrey-Martin (Edinburgh College) Derek Mackay (Cabinet Secretary for Finance, Economy and Fair Work) Daniel McKelvie (Heriot-Watt University) Jessica Morris (Heriot-Watt University) Jessica Morris (Heriot-Watt University) Douglas Morrison (City of Glasgow College) Ryan Patterson (Edinburgh College) Mark Richards (Scottish Government) Elliot Ruthven (Edinburgh College) Johnathon Scott (New College Lanarkshire) Scott Warden (Edinburgh College) David Watson (New College Lanarkshire)

**CLERK TO THE COMMITTEE** 

Alison Walker

#### LOCATION

The Mary Fairfax Somerville Room (CR2)

## **Scottish Parliament**

### Economy, Energy and Fair Work Committee

Tuesday 5 March 2019

[The Convener opened the meeting at 09:45]

### Decision on Taking Business in Private

**The Convener (Gordon Lindhurst):** Good morning and welcome to the eighth meeting in 2019 of the Economy, Energy and Fair Work Committee. I ask everyone to turn off any electronic devices that might interfere with proceedings. We have received apologies from Jackie Baillie and Gordon MacDonald.

Agenda item 1 is a decision on taking business in private. Does the committee agree to take items 6 and 7 in private?

Members indicated agreement.

## Construction and Scotland's Economy

#### 09:45

**The Convener:** Agenda item 2 is a round-table evidence session for our inquiry into construction and Scotland's economy. I welcome to the meeting all the apprentices and others whom we have invited.

I thought that it would be easiest to start off with everyone around the table quickly introducing themselves by telling us who they are, the college that they attend and the course that they are taking. I ask committee members to introduce themselves, too, for the benefit of the apprentices.

**Daniel McKelvie (Heriot-Watt University):** I am a trainee cost manager at Turner & Townsend and I take the construction and the built environment course at Heriot-Watt University.

**David Watson (New College Lanarkshire):** I am an adult apprentice in joinery at New College Lanarkshire's Motherwell campus.

John Mason (Glasgow Shettleston) (SNP): I am the MSP for Glasgow Shettleston, which is in the east end of the city.

Jessica Morris (Heriot-Watt University): I am an apprentice building standards surveyor for the City of Edinburgh Council and I am studying construction and the built environment at Heriot-Watt University.

Asher Humphrey-Martin (Edinburgh College): I study architectural technology at Edinburgh College.

Jamie Halcro Johnston (Highlands and Islands) (Con): I am a Highlands and Islands MSP.

**Elliot Ruthven (Edinburgh College):** I am studying plastering at Edinburgh College.

Liam Clark (New College Lanarkshire): I am doing joinery at the Motherwell campus of New College Lanarkshire.

Angela Constance (Almond Valley) (SNP): I am the MSP for Almond Valley, which is the Livingston side of West Lothian.

**Ryan Patterson (Edinburgh College):** I am studying plastering at Edinburgh College.

Charlie-Jade Combe (Edinburgh College): I am a painter and decorator from Edinburgh College.

Colin Beattie (Midlothian North and Musselburgh) (SNP): I am the MSP for Midlothian North and Musselburgh.

Johnathon Scott (New College Lanarkshire): I am a joiner from New College Lanarkshire's Motherwell campus.

Andy Wightman (Lothian) (Green): I am a Lothian MSP.

**The Convener:** We are joined at the table by the clerking and official report teams. I welcome everyone to the meeting.

I should have said at the outset that if anyone wishes to speak, they should indicate so by raising their hand. The sound desk will operate the microphone system.

I will start with a question for the apprentices. What attracted you to construction-related apprenticeships?

I will let David Watson go first.

**David Watson:** Obviously, there is the money that you can make in the industry. My father and brother are joiners so, for me, going into the same trade was just a natural progression. I definitely think that you have the opportunity to earn a good living, and there are a lot of opportunities and the chance to do other things, whether on the management or education side. That is my personal interest.

**Jessica Morris:** You can also get involved in a wide array of projects. There is a lot going on, especially in Edinburgh, and you never see the same thing twice. It is definitely interesting.

**The Convener:** Good. Are your friends in apprenticeships? Were some of you encouraged to do it because of, say, a family thing? Are there other reasons why you decided to go down that route?

**Johnathon Scott:** Friends have done it but in different trades. For example, one of my friends is an electrician—he is an alarm engineer—while I am a joiner. When we were at school, getting into an apprenticeship looked like an attractive option.

**The Convener:** What about other panel members?

**Ryan Patterson:** My grandad and my dad had trades, so I have been surrounded by it all my life and I just caught on to it.

**The Convener:** Would you recommend it to friends or family members?

**Ryan Patterson:** I have done; one of my friends is taking an electrician's course.

**Elliot Ruthven:** I have friends who were wondering what to do when they came back from travelling. I recommended something in construction, because it is hands on and there is job satisfaction in seeing something that you have built with your own hands. The Convener: Good. Andy Wightman wants to come in.

Andy Wightman: I am interested in how panel members found out about apprenticeships. What support was available to you in school, to give you advice on where to go and how to pursue your interests? Does anyone have comments on how much support they were offered or whether it could be improved?

**Daniel McKelvie:** I found my apprenticeship through the apprenticeships.scot website. The support from school varied and pushed us along the university route instead of the apprenticeship route. Support was there if we asked for it, but if we did not know what we wanted to do, it was hard to find. After school, the website was a good tool for finding out about apprenticeships.

Jessica Morris: I left school six years ago. I am not sure how much has changed since then but at my school, when I was there, the careers advice was very poor; I received my first and only careers meeting invitation three weeks before I went on exam leave in sixth year. If a student was not interested in going to university, it was almost as though they were ignored—no information about any other route was available. That needs to be addressed.

Andy Wightman: How did you end up where you are, then?

**Jessica Morris:** Through my own research and from looking on the myjobscotland website.

**Elliot Ruthven:** I could not agree more. I left school five or six years ago and at that time everyone was pushed towards university. If a student had decided not to go there, they were left to themselves to find out what they wanted to do. If they wanted to go to uni, the careers advice that they were given was, "Right, these are the grades that you will need," and that was it. If they wanted to go down the apprenticeship route, they were left to find out about that for themselves.

Jamie Halcro Johnston: I am very interested in that point. Will the other apprentices tell us whether that lack of engagement with careers advice is fairly common? Did you have sporadic, occasional advice rather than proper, consistent advice throughout your time at school?

**Ryan Patterson:** We were told about a website, which we had to explore for ourselves. Someone came in and talked to us about it and we had to learn from there—that was it.

Asher Humphrey-Martin: I have only about a year's experience of school in Scotland. When I moved here, the advice was quite limited. I was asked what I wanted to do and when I said that I did not know and that I would consider taking a year out, I was just left to it; I was given no further

advice. The attitude was that I would figure it out when I decided to go on into education.

**Charlie-Jade Combe:** My school was not so bad at giving careers advice; the staff would take us out of classes and meet us to push us towards thinking about what we wanted to do, and when we told them, they would try to find routes for us. I wanted to leave school, so they put me on to the Scotland working right programme, which is operated by a charity, and that is how I got into my apprenticeship. I did it through my own efforts, but the school staff had told me about the programme, so I did it with their help. Not all schools are bad at giving careers advice.

**Andy Wightman:** Would anyone else like to share their experience?

David Watson: I agree with Jessica Morris and Elliot Ruthven. I have been out of school for more than six years, so I am an adult apprentice; I started my apprenticeship quite late. I was not really guided by careers advice at school. I did my full six years at high school and left when I was 18, but I did not really know what route to go down. I eventually managed to get a trade apprenticeship in my late 20s. I knew that I was not going to go to university and so on. If I had been told that a trade route was an option that I could take and that you could make a good living, I probably would have taken that route, but nobody indicated that it was an option. I got my apprenticeship by phoning different companies. Eventually someone said that they would take me on, so that is the route that I went down.

Andy Wightman: If you speak to folk who are early on in college and who maybe came out of school just in the past couple of years, do you feel that things are getting any better? Are they being supported and advised? Do you have much experience of that?

Liam Clark: I feel like it has got a lot better. I left school two years ago, in fifth year, and I had quite a lot of help. The school had different sessions and stuff that you could go to—it just put them on. It did not choose specific people for them; you had to make your own effort.

Elliot Ruthven: I hear that people who are later on at school are getting to try trades—I have seen them at Edinburgh College. While they are still at school, they get to practise what it would be like to be at college and to do the work that they would do there—whether it is running cornice or whatever. When I was at school, I never got the option to go to a college to try a trade hands on.

Asher Humphrey-Martin: I am not so sure about going to college to try that sort of thing out, but since I have been working with the company that I am with, several students from the high school that I went to have come for work experience to get a view of what the industry is about. Schools have definitely improved in facilitating that sort of thing.

John Mason: I want to ask about your present experiences and especially about the balance between work and study. Do the two relate to each other? Would you rather have more time in college or more time working?

Liam Clark: There are loads of different types of joinery and people do different stuff, especially in college—people might do a certain type of joinery but the college tries to teach everything. If you were taught the one type that you are doing, you would get a bit more experience and the stuff in college would make more sense at work.

**John Mason:** Tell us a bit about your work and what you are doing in it.

**Liam Clark:** I am doing sheeting and roughing—the first fix. In college we are learning about how to build stairs and stuff, but I do not think that I need to learn that if I am doing the first fix, if you know what I mean.

**John Mason:** So what you are doing at college is pretty wide.

Liam Clark: Aye, you learn everything.

John Mason: Is that everybody's experience?

Jessica Morris: I am a building standards surveyor and the university course that I am on is quite vague. When we started out, we did not see the relevance of a lot of the modules, because they are quite vague, but my manager in the workplace is all for it, because a well-rounded knowledge of the industry as a whole brings a lot more benefits. We have a bit more understanding of why we are doing certain things. Although it might seem vague and irrelevant at the time, in the long run it makes our careers more versatile.

**John Mason:** That was my experience many years ago, when I was at university. A lot of the stuff that I did at university was of no use to me whatever, but that is another story.

**David Watson:** Liam Clark said that he does a specific type of joinery and that he learns about different things that he might not do on site. I agree with that. On our course, we are asked to provide evidence; we have a folio, which we build up. Because of the type of company that some of the guys are with, there are certain aspects of joinery that they cannot get evidence of, which becomes an issue, because if we cannot give evidence of the work that we are doing, how are we supposed to complete the folio? Perhaps the solution for joinery would be to do specific courses in the work that the apprentices are doing. Because it is such a vast subject, it is difficult to make the course generic.

10:00

**John Mason:** Do you feel that the work experience that you are getting is perhaps too specialised or that it is not wide enough? Is that inevitable?

**David Watson:** It is hard to say, because different companies do different things. For instance, I do new-build houses, so I do a variety of work, but Johnathon, who also goes to our college, does office fit-outs. I never do an office fitout, so if I was asked to get evidence of an office fit-out, it would be impossible, because that is not the sector that I am in. That is an on-going issue.

Johnathon Scott: That is the same, except vice versa, for me. Whereas David can do a roof, I will not be doing a roof, because I am in offices, so it would be difficult for me to get specific evidence of work on roofs for my folio. Fitting out offices, I am not going to do a roof.

**John Mason:** Could they do anything to change that, or is that just the way that life is?

Johnathon Scott: I am not sure, but I doubt that during my apprenticeship I will do a roof at all.

**John Mason:** Presumably, you could not do everything anyway.

Johnathon Scott: Exactly—it is too broad.

**Elliot Ruthven:** It is hard for a college to cater for individual apprenticeships. Companies all do different things, so it is hard for a college to look at a specific person and say that they will be doing only certain work for the next two or four years.

**John Mason:** On the whole, are you positive about what is happening?

Elliot Ruthven: I am okay, because I work for a very small firm that covers pretty much everything that we do on the course, so I am lucky, but there are people on my course who do two out of all the things that we study. David, for example, might struggle to get photographs of certain things that we have to collect evidence for, but I am okay, because my firm covers everything that we study.

**John Mason:** Do you feel that being with a smaller business is an advantage?

Elliot Ruthven: For me, on my course, yes.

**The Convener:** Is there any way for that to apply across the board? Larger companies might specialise in doing one thing, for example roofs, and whether a firm is large or small, it might be difficult to get a fit for everyone and to cover everything. Some small firms might do certain types of—

**Elliot Ruthven:** They are businesses, so they will take whatever work they can get; they are not going to stop taking some work and take on other

work just so that an apprentice can finish their Scottish vocational qualification. It is hard to cater for an individual person.

**The Convener:** Is there another way of dealing with that? Can that be worked out?

Elliot Ruthven: I do not know.

**David Watson:** You could speak to the employer and see what their business covers and then look at what the course is offering, to see if it covers it. As Elliot was saying, it is impossible for a college to cater for an individual apprentice, because there is a vast variety of work in every trade. On my course, people struggle, but the college lecturers have been brilliant at helping us to get the evidence. Guys like me, who cannot get evidence of specific joinery work, could perhaps have a week's trial with another company that does that specific work, or Johnathon could come to my company for a week to get evidence of working on a roof.

**John Mason:** I will come back to Jessica in a minute. David, have most of your lecturers had recent experience of working in the sector?

**David Watson:** I cannot say how long they have been out of the trade for.

**John Mason:** But can they give you examples from real life?

**David Watson:** They can give examples because they are tradesmen; they have been in real-life situations and they can share their experience—100 per cent. Whether that helps us in the situations that we are in is a different matter.

**Jessica Morris:** Meeting the demands of a course that is vague is an issue for most apprenticeships. If I think of my university class, I cannot think of a single one of us who could meet every module.

That comes back to the employer. I have a good employer, who has allowed us to go out to university instead of doing work-based learning; if there are exceptions, we learn about those parts in university. It has also arranged for outsourcing of stuff that we cannot cover in our work, so we are able to get experience with other employers to fill in the gaps.

John Mason: And your employer is the council, is it?

#### Jessica Morris: Yes.

**John Mason:** The fact that it is willing to place you with another employer to enable you to get work experience shows that it is extremely supportive. Does anyone else have a similar experience, or is that unique? **Daniel McKelvie:** I work with Turner & Townsend, and it has been extremely supportive of my university course—I am on the same course as Jess. The course covers a variety of things and, if we cannot meet a certain course module, the company will invest one of our working days in sending us to university for six or 10 weeks—or however long it takes—in order to ensure that we get the module covered. My work, like Jess's, has been pretty good with the whole picture.

**David Watson:** Daniel and Jess are on a university course; things are a bit different for those of us who are on an apprenticeship course. My company has not given me any support by sending me to get the evidence that we need for our specific course. I do not know whether that is because we are a low-level course.

**John Mason:** It sounds to me as if, whatever the level is, there is a similar problem in getting the experience.

David Watson: There are double standards.

**Ryan Patterson:** I am with an extremely small company, which means that we cover quite a lot of different things. I have not really had an issue with getting the experience that I need for my portfolio.

**John Mason:** You are in plastering, is that right?

Ryan Patterson: Yes.

**John Mason:** Can you tell us a bit about that and how it works? I do not know much about plastering.

**Ryan Patterson:** It is basically just making the interior walls of a house flat and square.

**John Mason:** There are different kinds of plastering, I take it. Do you get a different kind of plaster in a house than in an office?

**Ryan Patterson:** You get outside work, which involves dashing. Do you know what I mean—little stones on the outside of a house? Wet dashing protects the house from weather and makes it look nice.

**John Mason:** And do you get experience of all of that kind of work with your firm?

**Ryan Patterson:** Yes, definitely. I do not have much of an issue with getting the experience that I need for my portfolio.

**John Mason:** Do you know people who do have difficulty with that?

**Ryan Patterson:** Yes. Some people on my college course are doing mostly outside work. Because they are not doing much inside work, they struggle to get the information that they need for their portfolio.

**Dean Lockhart (Mid Scotland and Fife) (Con):** On sharing information and getting evidence, are any of you members of trade associations or trade organisations, and do they help in any way, or is it your employers that are members of trade associations and you do not really get involved?

**David Watson:** I have not been informed of any trade association or organisation: this is the first mention that I have heard of them. I do not know what such an organisation might do or whether it might help with the course. Johnathon Scott and Liam Clark are both on my course, but we have never been told about anything like that.

**The Convener:** Has anyone on the panel been told about that sort of thing?

Jessica Morris: We have several unions in our workplace and were made aware of them within the first month of working there. I am a student member of a union. I have not had much involvement with it yet, but I think that it would be an unbiased party to go to for help, if I ever needed it.

**Colin Beattie:** I will ask a question that might be controversial. Do you think that you get paid enough?

David Watson: No. [Laughter.]

**Colin Beattie:** Funnily enough, I thought that that might be the answer. Seriously, though, are the wages reasonable remuneration for where you are at this time?

**David Watson:** We are still learning, as apprentices, so the wages are definitely all right. There is also ambition to earn a lot more at the end of your apprenticeship than at the start of it.

**Jessica Morris:** I agree. I consider myself very fortunate in that I can study full time while being in a relevant full-time job. The pay reflects that; I can pay my mortgage and travel expenses quite comfortably, and I still have money left over. The wages might not seem like much to some people, but in the circumstances, they are fair.

**Elliot Ruthven:** I agree. We can be away from work for two weeks while learning, and we still get paid.

As an adult apprentice, though, I would perhaps take the opposite view. I have to pay my rent, my council tax and my bills, pay for my car, and still have to pay for the normal amenities, so if I do not get a little bonus every week or two weeks, covering my bills can be a bit of a stretch, given that I am on what is, basically, the minimum wage.

**Daniel McKelvie:** The wage for a first-year apprenticeship is very good, and you get the chance to study full-time at university and work towards a degree while getting work experience. Overall, I think that that is really good.

**Johnathon Scott:** It is fair that we earn less money than a fully qualified tradesman, because they do more of the job than we do as apprentices. Things are tight, though.

**Colin Beattie:** Do you have to meet any work-related expenses out of your wages?

**Daniel McKelvie:** I work at Haymarket, so I get the train from Livingston, but ScotRail is not the best for prices. I also have to pay for my car and pay my rent, but it is mostly the trains that hit me hard.

Colin Beattie: Is that others' experience?

**Elliot Ruthven:** I am probably at the opposite end, because any costs to do with work or my apprenticeship are covered by my employer or the Construction Industry Training Board, which is the organisation that puts us through the apprenticeships.

**Colin Beattie:** What sort of expenses are you talking about?

**Elliot Ruthven:** I live in the Borders and my apprenticeship is here in Edinburgh, so my digs are covered. If people do not have a car, travel to digs is also covered by the CITB or the employer. They cover most of the things that we would have to go out of our way to pay for, which helps when we are not earning as much money as everyone else.

Colin Beattie: Is that everyone's experience?

**David Watson:** I am from Coatbridge, but I am working in Edinburgh at the moment: the point that Daniel McKelvie made about ScotRail is a biggie for me, too, because of all my travel to and from my work.

On Elliot Ruthven's experience of the CITB, I have to say that it has not been so supportive to me. I get travel expenses from my employer, but I had to fight for them. I thought that I would, as an apprentice, get more support from the CITB. I fought and fought to get expenses, and it took weeks before I got the right amount to cover my going to and from work. I am not going to complain about it now, but at the time that put pressure on me because I was worried about how I was going to get to work. Those sorts of things were going through my head. It is all sorted now, but I could have done with a bit more support in the lead-up.

Colin Beattie: You had to fight for what you got.

**David Watson:** I had to fight, which I thought was a bit unfair for an apprentice. Adults have more to pay for, so when you are on the minimum wage, train tickets are the last thing you want to be worrying about: after all, if you cannot get to work, you do not get paid, full stop. I had those worries, but when I raised them with my CITB officers and asked what they could do for me, I got no feedback. They said that they would speak to people higher up, but they never got back to me. Nothing happened until I, myself, fought for the right expenses to get me to and from work. I do not want to go through that every time I move between jobs—nobody needs that pressure. That is my experience.

#### 10:15

Elliot Ruthven: To play devil's advocate, I will say that I had quite a supportive apprenticeship officer, who laid things out and said what the employer should cover. When we first started our apprenticeships, we noticed that we did not have to pay for those things, so if we had to travel and needed someone to pay for that, we would say that to the apprenticeship officer, fill out a form, and that was it. It can just be a matter of how supportive the apprenticeship officer is. They might just say, "We'll see," but I had one who said, "Right. Here's what you do."

**The Convener:** Is it partly about getting information in advance when you start, so that you know how to approach things?

**Elliot Ruthven:** Definitely. People should get all that information in advance so that they know what they should get as an apprentice.

**Colin Beattie:** Employment can sometimes be a bit of a bumpy road. If you had problems in your apprenticeship, who would you talk to about them?

**David Watson:** I would speak to my site manager; I have spoken to him throughout. I have been lucky, because he has been very helpful. However, at the end of the day, expenses, for example, are not his decision. He needs to go through his hierarchy to try to fund me to get to work. He has been very helpful, so he would be my first contact.

**Colin Beattie:** I am talking about things such as difficulties with training, which you have covered to some extent, and bullying, which happens in the workplace. Are you confident that you have someone to go to who would help you to resolve such problems?

**Charlie-Jade Combe:** There was an incident at my work in which a person was getting a bit too weird. I do not know whether it was because I am female in a male trade. I told one of my workmates, who told the office, and the office had a word with me to ensure that I was okay. I would go to my boss, the office or any of my tradesmen, because they are really nice, and they help. If something is wrong, I can always go to them. **Colin Beattie:** Having experienced an issue in the workplace, are you happy that it was properly dealt with and resolved?

Charlie-Jade Combe: Yes, definitely.

Asher Humphrey-Martin: I want to follow on from what Elliot Ruthven said about the apprenticeship officers from the CITB. I, too, have a very supportive workplace, but we have regular meetings—or check-ins—with our apprenticeship officer, who will ask us whether we are being paid fairly and treated fairly, and whether there are any problems. It is good that they are happy to address problems for us, as well.

Jessica Morris: We have workplace mentors: I think that, in the university programme, everyone who is on a course has a workplace mentor assigned to them. I would bring any issues to my mentor, who sorts out issues between work and the university, and acts on my behalf. The mentors are good.

**Colin Beattie:** That is an interesting point. Does anyone else have a mentor allocated to them?

**Daniel McKelvie:** Like Jess Morris, my group has a university mentor and a workplace mentor. They communicate quite a lot with the three of us. If we have problems with the university or the workplace, we can go to either of them. My line manager in particular is pretty invested in the university programme, so he is always checking and ensuring that everything is going okay with it.

**Colin Beattie:** Does anyone else have a mentor?

**David Watson:** In the apprenticeship route, it is the tradesman who teaches the person, or it is the line manager, who is the mentor. Apart from a CITB officer, there is not really anyone else a person can go to.

On what Asher Humphrey-Martin said, the CITB officer comes out to the site with us. However, from my experience, points that are raised with CITB officers still do not get dealt with, so people are left twiddling their thumbs, thinking, "What do I do now?" There are only so many avenues that a person can go down.

**Elliot Ruthven:** Because my course is quite small compared with others, we can get more time with the lecturer, who might have been through similar experiences in the trade or at college. We have quite a close relationship with the lecturer we spend half the month with them, in addition to the time that we spend with our tradesmen. They can provide advice on who to go to about workplace issues—to the CITB officer or whomever. We spend as much time with the lecturer as we do with the people at work. **The Convener:** Does that depend partly on the people involved? People—not just you, as apprentices, but the people whom you work with—have different pressures on them at different times and do not always get things right. None of us does. Are things working as they ought to and is there a system whereby you know that there is someone to whom you can go?

**Elliot Ruthven:** If the problem was in the workplace, we could go to the boss with it, but the boss might already be stressed out or whatever because of the pressure that they are under to get the job finished. If they already have problems, they will not want to have to deal with an apprentice's problem on top of them.

The Convener: I suppose, however, that people must make time to deal with what needs to be dealt with. In your experience, is time made available to deal with things that need to be dealt with?

**Elliot Ruthven:** In my experience, that happens because I am with a small firm. We know our jobs day to day and week to week, whereas big firms can be under high pressure to get a job finished within a certain time, with the result that the apprentice is just left to get on with their work.

**The Convener:** Do other panellists feel that that is a fair assessment?

**David Watson:** I work with quite a large firm, and I agree 100 per cent with what Elliot Ruthven said. The firm works to tight schedules, and sometimes we are just left to our own devices.

Angela Constance: Do our guests have any views on whether young people have a positive impression or a negative impression of the construction industry? What more could be done to encourage more young people into construction? I am particularly interested in how we could encourage more young women to pursue construction-related careers.

Jessica Morris: Thinking back to high school, I would say that I had neither a negative nor a positive impression of the industry. However, when we got to fourth year, there were people who obviously did not want to continue in school and it tended to be the naughty kids who went on construction-type apprenticeships, which were often perceived to be the easy route out, and that is not right at all.

Until about two years ago, I had no knowledge of the construction industry and did not know what sort of job opportunities existed. When I thought of the construction industry, I thought of men out on the work site covered in mud. There was not a good enough image of the industry or of how many different roles there are in it. I am still learning of more. It needs to be communicated early that there is so much more going on in the industry than first meets the eye.

**Angela Constance:** Could employers and schools do more to give a better impression of the construction industry?

Jessica Morris: Absolutely.

**Angela Constance:** Do you have any ideas about what would help?

Jessica Morris: I think that education about careers as a whole is important. There is very little knowledge in school of how many different roles there are in any industry. Pupils should be made more aware of all the different people who influence the design of a building, for example.

**Angela Constance:** You spoke earlier about getting your careers advice and information just a few weeks before you sat exams. I do not want to put words into your mouth, but do you think that careers information needs to start much earlier in schools?

Jessica Morris: Yes—100 per cent. The fourth year is when you start deciding which courses you are going to take, and that is when careers advice should be given. It should bring into school information on the different options that will be available to you, what to consider and how to get into the workplace. I had had one week of work experience when I left school—that was it.

**Angela Constance:** Would you have liked to have more work experience earlier in your school career?

Jessica Morris: Yes, and that is what I like about the apprenticeship. I have friends who went to university and who dropped out because they did not know why they were learning something. I am in the workplace, gaining experience and working at a factory, and I enjoy the job. A lot of people go to university but then realise, after a year in a job, that they do not like it. Having work experience early gives people a better idea of what they would get into if they went down that route. Work experience early on is beneficial.

**Angela Constance:** Have our other guests any opinions on that?

**Ryan Patterson:** The school that I came from has one week every year, from the third year onwards, when there is a chance to go on work experience. People stay in school to study or go out and learn something from a job for a week. That is what I did, and in the summer I did work experience again to get some money. The work experience was really good, as it gave people who were still in school the opportunity to learn about different things and get an idea of what they might want to do. **Angela Constance:** If I understood you correctly, your opportunity for work experience at school helped you to find work experience in the school holidays.

**Ryan Patterson:** Yes, although it was not at the same place. I asked about it when I met them during the week's work experience. They put a post on Facebook and social media to say that they were looking for an apprentice. I was waiting for my exam results, and I worked with them over the summer holidays. I decided to stay on and worked a year with them, and I got my apprenticeship the next year.

**Angela Constance:** Charlie-Jade, do you have views about how to make the construction industry more attractive?

**Charlie-Jade Combe:** Through advertising. There are no photos of female painters or women doing any trade—-it is always men—so there needs to be more information about females. A painter could go into interiors work as well, so they could decorate a whole house.

Angela Constance: Are role models important? You spoke about information literature including not just young men but young people from all walks of life and all backgrounds, including young women. Would it help to meet women who already pursue careers in the construction sector?

**Charlie-Jade Combe:** It probably would. The information needs to be put out there, especially in schools. Like Jessica, I had only one week of work experience—I did hairdressing, and it was nothing like I thought it would be. Maybe there should be a trade in there, as well. In my school, people now go to college so that they can experience it before they leave school. The information should be more open about what females do—it is not all hard labour; there are good bits.

#### 10:30

**Angela Constance:** I am interested in how you made the leap from hairdressing to construction. What was the spark?

**Charlie-Jade Combe:** I used to dye my hair a lot, and hairdressing was something that I wanted to do when I was younger. I think that what put me off was the people rather than the work itself. One bad experience can make you not want to do something, especially at a young age—I think that I was in third year when I was doing it.

I was always into art and stuff, but I did not want to keep studying; I wanted to make money and do something. I do not like sitting down in the same place constantly, so I thought of painting, because you are moving about and you are still doing art but in a different form. That is how I got there. **Daniel McKelvie:** When I was at school, it was down to the individual to find work experience. If you wanted to experience a trade, you had to know someone who was already in a trade. Because you had to get consent forms signed and so on, it was hard to randomly go up to someone in a trade and ask to work with them for a week. Obviously, high schools would struggle to get placements for hundreds of pupils at a time but, if we could change that aspect a bit, it might help people to get the experience they want.

There is an issue with workshops, too. When we had workshops in school, they involved people from universities coming to talk to us about their courses. We did not really get pitches from apprenticeship programmes or anything like that.

Jamie Halcro Johnston: When Andy Wightman and I visited Edinburgh College vesterday, one interesting subject that came up was the future of the construction sector and how there will be changes through automation, manufacturing and so on. I would like to know how the apprentices who are with us today feel their jobs might be impacted by changes such as artificial intelligence and by robots and other machines doing more work and taking on more roles. How might that impact on you, not only in terms of your jobs but in terms of the need to adapt, re-skill and so on?

**Elliot Ruthven:** From a personal point of view, because I am in plastering I am not really worried about that. The products that are used—the materials—might develop and improve. When I see a robot plaster a wall, I will be the first to say, "Fair enough," but it seems like it would be hard to get a computer program or whatever to do that, so I am not worried. Plastering has not changed in the past 30 or 40 years. If it changes in the coming years, though, that is fair enough.

Jamie Halcro Johnston: You are ready to take it on.

**Elliot Ruthven:** Yes, I am ready to take on a robot when it comes to plastering a wall—any day.

**The Convener:** Do you think that the same thing applies to painting, Charlie-Jade?

**Charlie-Jade Combe:** At the end of the day, you will still need someone to operate the machine or to turn it on and off, but I cannot see a robot hanging wallpaper any time soon. Maybe it could handle the cleaning up, but I do not see it doing anything that specific.

**The Convener:** So, there will be no plastering robots and no wallpapering robots.

**David Watson:** I also cannot see there being a joiner robot. Maybe a robot could help with lifting heavy things but, in terms of the actual fit-out of stuff and the attention to detail, I cannot see a

robot having the same eye for certain things as a human being.

Jessica Morris: I agree with what the others have said. There are two sides to my job. There is the work-based side that involves assessing applications against regulations and so on, but the other half of our work involves being on site, assessing the building itself, and you cannot really take the human element out of that—you cannot send a robot out to do that. I cannot imagine it, anyway. I think that there is a line between getting a program to do something and making sure that it is done.

John Mason: I will play the devil's advocate for a minute. We have visited CCG (Scotland), which builds in factories. It argues that a robot will always put a nail in exactly the same place in a piece of wood. There is no human error; everything is exactly the same. I would have thought that that might impact on David Watson's job, and, if Jessica Morris knew that that was happening, it might impact on her job, too.

**Jessica Morris:** What piece of technology is 100 per cent perfect? Things do not always go right.

**The Convener:** We have even had discussions in Parliament about voting robots. I am not sure whether John Mason thinks we might have robot members of the Scottish Parliament one day. [*Laughter*.]

**Elliot Ruthven:** It is very hard to substitute someone with a trained eye. You could build a robot to do a particular job—that is fair enough but what would happen if it came across problems when carrying out repairs? How would it problem solve a situation that only someone who has been trained for years has come across? It would be fine if it was placing nails into something that was all the same, but what if it came across pipework, for example? It is very hard to program for the many different problems that there are in the construction industry.

**Charlie-Jade Combe:** This might sound stupid, but, if you were on an outside job and had a robot working for you, what would happen if it rained? Would it just malfunction? How would it work? [*Laughter*.] If we get rained on, we still work; it is all fine.

**Ryan Patterson:** In the future, robots could perhaps build new builds, but there are lots of old, misshapen houses that need someone with a trained eye to sort out any problems.

Jamie Halcro Johnston: There is confidence among the panellists, which is certainly encouraging. I take the point about having a trained eye. A person develops a skilled eye over years of experience, and it is very hard to replicate that.

Another issue that came up during our visit yesterday was the increasing role that digital skills play in a lot of apprenticeships. That is to do not so much with the robot side of things as with how new technology can help skilled workers in the future. Is enough of that subject included in your training, or is how you are being taught still very traditional?

**Daniel McKelvie:** A few different companies have come into my workplace and pitched different ideas to us. I am involved in costing work. A virtual reality technology company has shown us how it can make a virtual building and show the contractor where the pipes and everything else will go and how it will all look. That can bring down the timeline and the costs, because they will know exactly what will be there. It is a lot easier than just looking at drawings with no imagination. Technology is definitely coming that will make things a lot easier.

**Jamie Halcro Johnston:** Are you being exposed to that technology in your training?

**Daniel McKelvie:** Yes. We are getting there slowly.

**Elliot Ruthven:** We are probably the opposite to that. We are still learning skills that our lecturers were taught 20 or 30 years ago. There is not much digital technology to improve how we learn; it is still very traditional. I think that learning in that way is quite good. It is very hands on, which I like.

**The Convener:** Do you use digital equipment in your work at all? Do you have digital spirit levels, or is the equipment traditional?

**Elliot Ruthven:** It is still very traditional. Obviously, there are things such as laser levels, but we still use spirit levels, water levels and so on.

**The Convener:** Would it be helpful to have modern laser or digital equipment?

**Elliot Ruthven:** If it would help, yes, but I do not see where it would come in. As far as plastering is concerned, it is very hard to bring something modern to something that has been done in the same way for 20 or 30 years.

Andy Wightman: Forgive me, Elliot—I have never done any plastering—but, from what Ryan Patterson said, it seems that, a lot of the time, one of the challenges that you face is getting things flat. Could laser scanning not help with that?

**Elliot Ruthven:** That sort of thing is available, but you need the skills to get things flat. You might use some piece of laser equipment to check whether it is flat, but the skills needed to get it that way are the same skills that were used 20 years ago.

Andy Wightman: In that case, is technology helping you to develop your skills, because it allows you to know better whether you are doing a good job?

**Elliot Ruthven:** Yes. In that respect, it probably is. There are things on the internet that you can use to check whether you are doing things as you are supposed to be doing them, even if those things were done 20 or 30 years ago, but you get to the end product by doing things as they were done years ago. The use of technology might be different in other trades, but I would say that things are still the same in our trade. That was why I chose my apprenticeship—the work is still very traditional and hands on.

Asher Humphrey-Martin: A lot of my work is office-based design work on computers and, even since I started my apprenticeship, there have been new programs and developments in threedimensional visualisation of designs that we have been able to use. It is all well and good to draw something up and think that it looks fine on paper, but, as the other guys around the table will know, it will come on site and be an absolute disaster. Being able to see all the components of a building coming together really helps a lot. It is better than just drawing out a floor plan and expecting things to work.

The Convener: That is interesting, because there has to be some connection between what you do with a computer program and the actual work that gets carried out. Someone with whom I studied, who was a descendant of the composer Schubert, wrote his own symphonies on a computer program, but he told me that no human being could play them, so that was not much use. Is the connection between the modern computer programs that are coming in and what happens on construction sites close enough to be of much use?

Asher Humphrey-Martin: Absolutely. Before they start a project, some of the subcontractors that my company works with will come to our office and talk it through. Being able to do that with a 3D model—even being able to walk through the building with the guys who will construct it—helps to make sure that we are all on the same page. They can even point something out and say, "That's not going to work—it would be better if we did something like this instead." It really helps us in communicating with them.

Jessica Morris: My point is relevant to what Asher Humphrey-Martin has been saying. We work very closely with architects, and technology really helps us in that respect. We still get one or two hand-drawn applications, but it takes us a lot longer to assess them. With computer-aided design and building information modelling software, it is a lot easier to identify and pinpoint the areas that you want to look at and to spot problems straight away. It is definitely helping the industry.

Jamie Halcro Johnston: I have a final question. Where do you see yourselves and your careers in 10 years' time? Indeed, just to widen that out a bit, how many of you see yourselves either in 10 years' time or at some time in the future taking your skills and starting your own companies or being self-employed?

The committee heard from members of the Scottish Youth Parliament. Of 12 of them who had chosen to go to university, only one or two had considered starting their own company. However, a good proportion of people who have practical skills do so. How might being able to take your skills and start your own companies or be selfemployed factor into your futures?

#### 10:45

**Ryan Patterson:** Before this meeting, a few of us were talking about how we had not been taught anything about becoming self-employed. One of the main reasons for people not starting businesses is that they do not know how, so they just stay with their bosses. They are not sure how to cope with being self-employed.

**Jamie Halcro Johnston:** Could your training include advice on setting up a business in the future? Obviously, that would not be a priority for your current employer.

**Ryan Patterson:** Yes. There could be a little bit about it in our training at college. We were taught some business practice at school, but I did not take anything from it. We definitely need more information about becoming self-employed.

Jamie Halcro Johnston: Would that be of interest to you?

Ryan Patterson: Yes.

The Convener: Would anyone else like to comment?

**Elliot Ruthven:** Later in my life I will probably have the opportunity to go self-employed. I work for someone who works for themselves, and I might have the chance to take over their business. However, I agree with what Ryan Patterson said. At the minute, I would not know where to start—except by asking my employer about their experiences—or what the risks might be. I know about some of the benefits, but there might be others. At college I might be taught something about pricing jobs, for example, but there are many other risks in going self-employed that we

apprentices do not know about. We might think, "That would be fine. I would get to choose my own hours and the work that I do," but there are so many other things to take in, such as paperwork, problems in finding work and how to get through difficult periods.

Jamie Halcro Johnston: Do you work for one person at the moment?

Elliot Ruthven: Yes.

**Jamie Halcro Johnston:** So, in the future, they might want you to take a more active role in running their business.

**Elliot Ruthven:** I might get training in that way, which would help me. However, how would other people know what it takes to run a business? Obviously, it is not an easy task.

**David Watson:** I want to go down the further education route, and my college is providing me with support on that. Eventually, I want to do a higher national certificate in construction management and perhaps go into that area, where I would get a lot of benefits and could work my way up the ladder. There are a lot of risks in being self-employed, such as having to find work and to earn enough money to cover the holiday or sick pay that an employee would be paid. Those factors put a lot of young people off becoming selfemployed.

**Daniel McKelvie:** A lot of people would be put off because some areas in the construction industry are already dominated by certain companies, so it would be hard for someone to start their own company and attract good clients and projects. There are only so many companies that can take on the work, so I suggest that becoming self-employed is not such a good idea and that young people would be better off working their way up in their jobs.

**The Convener:** Would anyone who has not already responded to the question like to come in? We are almost at the end of our time.

As no one else has indicated that they wish to speak, I will give Elliot Ruthven the last comment, as he indicated earlier that he wanted to come back in.

**Elliot Ruthven:** I want to pick up on the points that were made by David Watson and Daniel McKelvie. What I said earlier was my personal view. The amount of work that I see a selfemployed person do to cover themselves if they want to take a holiday or they are off sick is unbelievable. However, if someone sticks in at the role that they are in and goes down the management route, they seem to receive more benefits. A lot of work is involved in a selfemployed person covering something as accidental as being sick and not being paid for something that they cannot help.

**The Convener:** I thank all our witnesses for coming in and being with the committee for this roundtable session.

I suspend the meeting to allow for a change of witnesses.

#### 10:50

Meeting suspended.

#### 11:00

On resuming—

The Convener: We continue with evidence for our inquiry into construction and Scotland's economy. I welcome our next three witnesses, who are Douglas Morrison, associate director of innovation and STEM—science, technology, engineering and mathematics—at the City of Glasgow College; Lorna Hamilton, member of the Scotland board of the Association of Women in Property; and Scott Warden, head of faculty for engineering and built environment at Edinburgh College. The sound desk will operate the mic, so there is no need to press any buttons. If you want to come in during the discussion and you do not get brought in naturally, simply indicate by raising your hand.

The first questions are from John Mason.

**John Mason:** I thank the panellists for coming. We have had various submissions to our inquiry into construction. I will not say who, but somebody said that, when it comes to adopting new technologies,

"the construction industry has remained in the stone age."

I do not know whether panel members were in the public gallery when the apprentices were here, but I was surprised that they were not more optimistic about or expectant of new technology coming in. What are your views on where we are with new technology? Is it being driven by the colleges and universities, or do they just reflect what is going on in the industry?

Scott Warden (Edinburgh College): I thought that the apprentices undersold themselves a little because, when they come into the college sector, they already have information technology and digital skills. They use those skills in college, but I think that they just see that as normal.

There is a fair bit of work to do, but perhaps the direction to take is the IT and additional skills that are required for advanced and off-site manufacturing. The traditional skills will still be there, but a lot of work is still to be done on whether we introduce robotics or automation into

mainstream education. That would be in a more controlled environment off site, or in new builds to a certain extent.

The apprentices undersold the knowledge that they already have. They touched on portfolios, too. As they already have digital skills, they use their phones or iPads to collect information, which they bring back into college. They do quite a bit on those skills, but they see it as the norm.

**John Mason:** Do you see yourselves as leading on the innovation front at Edinburgh College? Do you push that ahead, or is that not a role for the college?

**Scott Warden:** A new MA programme was put in place about a year and a half ago and there are not a lot of new technologies in it, so, if we are to add them in, the college sector needs to put the new technologies and learning in on top of the current qualification.

In the future, I see this area as being incorporated in the work that we do in schools and full-time programmes, which will lead into modern apprenticeships. We need to look at how we tie in robotics and automation with coding and programming at an early age, so that it becomes standard practice and, by the time students get into the college sector, they are already aware of all that. We start building on those transferable skills in the MA programme, so that, if the skills are required in off-site manufacturing or if robotics come into a certain part of the industry, our students have enough training to start.

Lorna Hamilton (Association of Women in **Property):** I tend to agree with Scott Warden. I think that the apprentices undersold themselves; they are from a generation that just takes certain things as a given. I was slightly surprised that they did not seem to have a better understanding of BIM and CAD software and did not mention how, when they are on site, they use tablets to pull up drawings. Perhaps they just take that as a given and nothing exceptional.

One of the difficulties in the construction industry is that the large organisations are continuing to develop and broaden digital engineering and the use of BIM and CAD and so on in off-site manufacturing and are requiring their supply chain to buy into that. As a result, the supply chain can be one step behind in certain things. It is good that those in the chain are getting brought along, but it can preclude some much smaller companies—and, indeed, those who are self-employed, as you discussed with the apprentices—from dealing with certain contractors or procurement methods. That is something that we should watch out for.

Douglas Morrison (City of Glasgow College): I agree with what both witnesses have said. It is right for us as a sector to focus on some of the high-value and technologically advanced methodologies that have already been mentioned and which in time will be adopted by the supply chain as companies seek to secure long-term work from the main contractors.

Colleges play a specific role in supporting early career development and, from the evidence that we have heard this morning, there is clearly more that we can do in that respect. We work very closely with microbusinesses, small businesses and sole traders, which make up a fairly sizeable portion of the industry, and there are questions to be asked about how we support such companies at the very basic level of digital adoption and literacy with regard to, for example, invoicing, ordering and managing resources. As digital adoption increases, we will see colleges and universities playing an increasingly important role in supporting those companies to digitally transform their business.

**John Mason:** If we have the colleges on one side and small businesses on the other, where does the Construction Scotland innovation centre fit into the picture?

**Douglas Morrison:** Before I respond, I should declare that I have a position on the board of the innovation centre—

John Mason: So you will know about it, then.

**Douglas Morrison:** Yes, I do. The innovation centre, which has existed for almost five years now, has acted as a beacon for innovation and possibility within the industry. As for what it has done in colleges, I think that there are a number of very good examples of its ability to engage the education sector and the construction industry in developing and adopting a wide range of technologies that are aimed at addressing key issues in the industry. Those issues might include sector attractiveness and productivity, and might even extend to the adoption and integration of digital technologies.

I would just like to pick out a couple of examples. On the issue of sector attractiveness, which we heard about earlier and which I am sure we will get to later—

**John Mason:** I think that someone else is going to ask about the image of the whole sector later.

**Douglas Morrison:** One of the projects that the innovation centre has supported is the development of our computer game. Aimed at 14 to 16-year-old children, the game raises awareness of careers in construction and has a very strong focus on environmental sustainability; equality, diversity and inclusion; and responsible investment and inclusive growth. Perhaps I will be able to talk more about that later.

The innovation centre also leads on national developments for off-site and advanced manufacture, building information modelling and college lecturer continuing professional development opportunities, which are vitally important to keep lecturer expertise up to date. It is investing in a project that is close to my heart, supports small and medium-sized which businesses to assess the extent to which their workplace practices are inclusive. It gets to the bottom of the key issue of the lack of diversity in the industry by understanding the underlying issues and setting baselines so that the industry can start to measure progress in a meaningful way. The innovation centre connects the colleges and the industry and is having a meaningful impact.

**John Mason:** Mr Morrison is obviously quite involved in the innovation centre; I am not sure how involved the other panellists are. We have had a feeling from some witnesses that the innovation centre is not as well known across the country and among SMEs as it could or should be. Do panellists have any thoughts on that point?

Scott Warden: I agree to a certain extent. Over the five years of its existence, I-as someone in the college sector-have dealt more with the innovation centre in the past year and a half than in the prior three and a half years. The discussions that we have had with it have been to find out what it is doing and how Edinburgh College and the college sector can get involved with it. Most of its work that I have come across has been at a university research level; there has not been space for the further education sector as yet, but the colleges are keen to do that sort of work and get more involved. I met members of staff at the centre recently to see how our college, and the college sector in general, can work more closely with them and get access to the funding that is available to universities.

It is important that the message gets out to the college sector, and it is getting out now. We are there to guide our local companies, small or large, and to signpost them to the innovation centre. Its support is there with the help of the colleges, and signposting is a lot of the issue.

**Lorna Hamilton:** I am not in education, as I have a main contracting background, so I may have a different perspective. The signposting means that large companies that want to explore some research or understanding know where to go to get to the likes of the innovation centre. The issue is how to ensure that the signposting is seen throughout the supply chain, so that companies can take advantage of the centre. If they are in the know, they know, but if they are not in the know, it is hard to get the message across.

**Colin Beattie:** We have heard evidence that the future of construction will not necessarily be on site, because the big improvements and developments are in factory construction and design. What are the colleges and others doing to prepare current and future apprentices for that challenge? The situation will be very different in the future, and we can see the developments that are coming.

Scott Warden: The apprentices on the earlier panel did not feel that robotics and automation will come to the industry at a level that will affect them. I tend to agree with them that a large majority of the work that they undertake will be based in the existing types of houses. Automation, whether off site or on site in a controlled environment, will be quite a low percentage of the work. The on-site environment is not one that works for some of the robotics. For the off-site side, the energy skills partnership has matched up three colleges and three off-site manufacturers to work together in the sector. They work quite closely, but the numbers that are coming through for those training programmes are quite small; it is a small part of the market.

In the future, colleges will develop learners through progression from school-college partnerships into full-time programmes and modern apprenticeships. We will need to incorporate into those programmes consideration of how people interact with robots, including collaborative robots. A lot of that will come down to coding and programming; the question is how we build those basic skills into standard, core programmes.

#### 11:15

**Colin Beattie:** Do we understand what technological changes are coming? We have made site visits to look at the production of prefabricated units for houses, but where does the technology go beyond that? What is coming down the line? How will we prepare apprentices and others who are entering the trade for that?

**Scott Warden:** There will be a mixture. For offsite manufacturing, the numbers are low at the moment. We can upskill our current MA students to a certain level but, when they go into an off-site manufacturing environment, they use technologies that look as if they are iPad based—that applies to what I have seen, anyway—and which involve pretty basic programming and coding technologies. It is not a huge leap for a skilled tradesman or apprentice to go into that environment.

At the innovation centre last week, a presenter said that off-site manufacturing might not be the way forward for the industry. His firm is part of a cluster of large-scale house builders, and he feels that there might be a mixture of off-site manufacturing and an almost Ikea-style flatpack approach. Instead of a full house coming out of a factory good to go, we could mix the timber-frame erection that we already do well in this country with a pod for the kitchen or the bathroom, for example, which would mean bringing flatpacks to the site. There would be a mixture of off-site work and that style of development.

**Colin Beattie:** Are technological advances in the industry being overhyped?

**Scott Warden:** Perhaps—we have not really seen them come through yet. Off-site manufacturing has been on the agenda for the past four or five years, but it does not seem to have taken off to the extent expected by the college sector, the partnerships and the training that is required for the partnerships.

**Douglas Morrison:** A range of things are at play. It is fair to say that off-site manufacturing and modern methods of construction are not the only answer to the need for low-cost, affordable housing and for more housing, but there is a place for them. We have started to see the development of an employer-led network in Scotland and we have seen the excellent work that is being delivered through Edinburgh Napier University, which is looking at the business case for off-site construction and modular construction.

Such technology is not necessarily new; it has been used, and used well, around the world. Our question is about how the technology and the methodologies fit in the Scottish context. That extends absolutely beyond the technology into looking at the culture, procurement and the availability of materials, and the list goes on. It is too early to have an evidence-based view on the long-term viability of the approach, although all the indicators are that it is the direction of travel.

Colin Beattie asked how we identify the technologies that are coming on stream or are likely to come in the medium to long-term future. That question is difficult to answer, but I can say that the industry is focused on adopting technologies that make workplace practices cleaner, safer and more productive. If any technology—whether it exists in the construction industry now or in peripheral or adjacent industries—had a clear business case that demonstrated a positive impact on any of those measures, I am confident that the industry as a whole would consider that technology's viability.

**Colin Beattie:** Off-site construction aside, what you are saying seems to be a bit vague—

**Douglas Morrison:** In what way?

**Colin Beattie:** It is as if there were no clarity about the areas in which we can anticipate technological advances. Are there such areas?

**Douglas Morrison:** Yes, there are areas in which we are seeing technological advances. Leaving off-site construction to one side, there is the adoption of building information modelling and the adoption of 3D visualisation, which was mentioned by contributors on your first panel today—

**Colin Beattie:** Do people use such technologies already?

**Douglas Morrison:** They do but—again—use of such technologies is fairly embryonic and will mature.

The key challenge is in taking technologies beyond the design stage and beyond the large contractor, so that they become embedded in practice throughout the supply chain and down into the small and medium-sized companies. The adoption of technologies is a culture challenge.

**Colin Beattie:** On a slightly different note, how do colleges and universities engage with the thousands of small businesses and microbusinesses in Scotland? It is easy to deal with big companies, but it is incredibly difficult to engage with small ones, which are the backbone of the sector, after all.

**Scott Warden:** I think that the sector does well at engaging with employers. We have thousands of apprentices in Edinburgh College, and there are the best part of 20,000 apprentices in the construction sector. Engagement is something that we do very well.

We could support organisations a bit better in relation to how to get our students—or their workforce—into the workplace sooner, and at less risk to them. The construction industry has perhaps missed a trick, in that no foundation apprenticeship is attached to the industry; there is a foundation apprenticeship in civil engineering, but there is not one for the trades. If we take anything away from today, it should be that a foundation apprenticeship would be ideal for the construction industry. It is a good way of supporting microbusinesses to reduce the risk of taking on an apprentice, because employers worry about taking on a four-year commitment—and the associated financial commitment.

There should be engagement with employers as young people come through school—that pipeline should come through first, second and third years of secondary school, with the foundation apprenticeship kicking in in fifth year and sixth year, so that colleges can deliver, in partnership with the school, a programme that involves a work placement. That approach would enhance the working relationship with a vast number of microbusinesses with which we do not engage at the moment. Something along those lines would be a really helpful addition.

**Lorna Hamilton:** One of the most critical points to make is that a transparent pipeline of work will allow people to take on more apprentices—or it will give them more confidence to do so. Regardless of whether we are talking about large contractors, the supply chain or small and microorganisations, it is difficult for employers to make the commitment, so the more surety we can provide about work and confidence, the more able organisations will be to take people on.

Andy Wightman: There was a drop in the number of students who enrolled on college construction courses, from 24,851 in 2008-9 to 17,927 in 2017-18. Is that cause for concern, or is it just due to the state of the industry over the past five or 10 years?

**Douglas Morrison:** There are two key issues to consider. The first is the recession that we have experienced: we know that the construction industry is disproportionately impacted by an economic downturn. A recession also has an impact on how confident young people—and their parents and advisors—are about entering a career in an industry in which there have been large-scale layoffs.

However, we also have to consider what has been termed as the war on talent, which is cutting across our sectors just now. The emergence of an ever-growing digital sector, in particular, that offers very attractive career prospects, a wide range of flexible working and high earning potential, has made it increasingly difficult for the construction industry to present a robust and compelling case that will make young people come in and commit to a career in the industry. That is reflected in the decrease in enrolments.

**Scott Warden:** I agree with Douglas Morrison, but we also need to consider the migrant force in Scotland, which is sitting at about 14,000. There has been a large increase in the number of foreign workers in the industry, who have probably taken some of the roles that our apprentices would traditionally have taken.

I also point out that, in the south-east region, the number of apprentices is probably the largest that we have had for a number of years. At the moment, there are about 1,000 apprentices in construction, which is an increase of about 600 places from the figure four years ago. There might not have been such an increase all over Scotland, but there are certainly increases in areas where a lot of house building and construction work is happening. That also ties in with the increase in the foreign workforce over the past 10 years, which might be affecting the numbers.

**Lorna Hamilton:** We are very aware that a high number of people dropped out of the industry during the recession, and those people did not return. They are a few years older. Indeed, they are of another generation, and now that their children are coming up through the ranks, they are not recommending that those children go into the industry after the fall-out that happened in their careers—in particular, for people in the trades.

Obviously, the last recession hurt us a lot. The fact is that, in times of recession, women either drop out of the industry sooner or do not enter it in the first place. Perhaps that is because they do not have role models or a support mechanism, because they see no future in it or because they think that other work can give them a more stable career environment.

Historically, it has taken the construction industry a long time to recover from recessions: this one has hurt particularly. We have been going through it for quite a wee while. We are still struggling to improve things. I think that that is because of competition from other industries and the negative press that the sector gets. You rarely hear a good news story about construction in the public press. The story is different in the construction press—although we are probably the only people who look at that. The man or woman in the street does not see good news stories about the industry, so it is important that we all get the message out there about how vibrant construction can be.

**Andy Wightman:** You said that people do not see good stories. Are you implying, then, that they are seeing bad stories?

**Lorna Hamilton:** People see some bad stories, but in fact they see very few stories at all about construction in the general press. It would be good to highlight some of the exciting parts of the industry so that folk understand that it is not just about laying one brick on top of the other, pouring concrete or doing electrical work, but about creating communities and the environment that we live, work, operate and are involved in, which includes schools and so on. If we could, in the public press, put across the message about creating communities, that would go a long way.

Andy Wightman: You said that you are representing women in construction. Obviously there are low numbers of women in the industry, but the apprentices in the earlier session told us about the many opportunities that are available. Is there a problem with the way in which the industry is being promoted in, for example, schools? The apprentices felt that the option had not been promoted much when they were at school. 11:30

**Lorna Hamilton:** That is an issue; it has been an issue for all my working life. In the 1980s, I was heavily involved with the CITB in promoting the industry in schools and there were no barriers to women going into construction—of course, that is just my opinion.

As an industry, we thought that we had sussed that out—that we had got that message across. That promotion fell away in the 1990s. We thought that we had ticked the box and that the schools understood. The reality is that careers advisers identified architecture, engineering, civil engineering and perhaps mechanical engineering and knew about the roles of bricklayer, joiner and electrician, but they did not know about the options and pathways.

Everything that I hear now is similar, which concerns me. Many organisations, including the Association of Women in Property, are going into schools. I am to an extent involved in speaking about engineering to primary school children, starting with seven, eight and nine-year-olds. We try to get the message across to children and their parents.

You heard from most of the apprentices today that friends and family got them into construction. A lot of what we do is about talking to parents as well as to careers advisers. It is about not just the different roles, but the pathways. Gone are the days when people just went to university full time to do surveying or engineering, or went to college to do trades. There is a mixture of routes into those roles. We are all working hard to get that message across, but it is a hard battle.

**Scott Warden:** On that point, it is interesting that the apprentices said that there is still stigma attached to the trades. I hear from teachers and advisers that some students who could go into construction are not very academic but would make good tradesmen. Within the construction industry, I have never heard an employer say that they do not want anyone who is academic. How do we change that mentality?

Jessica Morris—who went to university—made her career choices in secondary 4. We need to influence school pupils when they are in primary 7 or secondary 1. At Edinburgh College, we deliver a STEM inspiration programme to about 3,500 school pupils. They are boys and girls from all walks of life and schools. We try to encourage them to see that engineering, construction and science are all excellent career choices.

We try to influence them at that stage, but it does not stop there; there needs to be progression and a pipeline. We influence pupils at P7 and S1; the next stage should be colleges delivering construction programmes in S2 and S3, or pupils coming to the college. We must build on qualifications year on year, so that the young people build experience from the age of 10 or 11, all the way through to the foundation apprenticeships that I touched on. I see it as crucial that in S5 and S6 they do work placements through the schools and work with colleges.

We hope that the work that we do to influence young people will tackle the gender imbalance and, perhaps, influence some of the more academic candidates to take the construction route.

**Douglas Morrison:** I support what the other two witnesses have said. For a number of years, the industry has worked predominately on a model of informal recruitment—the child, the nephew, the niece and the family friend. The industry has never had to work too hard to convince young people, who are going through the school system, to come into it.

I feel for careers advisers: it must be incredibly challenging to keep abreast of the wide range of developments across multiple sectors and multiple job roles. With that in mind, I believe that the industry has a leading role to play in demonstrating and convincing young people that the construction industry represents a career of choice. I see that happening with the CITB, with programmes that are being run through colleges and universities and with outreach work that is being done by organisations such as the Association of Women in Property.

I am starting to see the coalescence of a structure and, almost, a strategic approach to engaging young people. Time will tell whether that approach is successful, but at least it is emerging.

**Andy Wightman:** Yesterday, Jamie Halcro Johnston and I visited Edinburgh College as part of the inquiry. I also visited Edinburgh College last week to meet the principal, who said that there is still an issue.

Lorna Hamilton talked about there being many pathways in the industry and education. We also heard encouraging news about how the universities and colleges are working more closely together. However, we have also heard that there is still a problem in relation to parity of esteem between colleges and universities, despite the fact that colleges are delivering about 30 per cent of higher education courses.

How can the relationships between universities and colleges, workplaces and schools be improved to maximise the opportunities for young people to identify what they want to do? How can young people have a flexible career path, so that they can change their minds about precisely what they want to do? **Scott Warden:** A fair amount of work is currently being done with universities and colleges on setting up graduate apprenticeship programmes and arranging how they lead on from foundation apprenticeships. At the moment, there are several programmes around the country.

In civil engineering, for example, young people who are still at school come to college and do a work placement. When they have finished that foundation apprenticeship, the obvious route is either to go into that employment or on to higher education at university. There is still an issue with consistency in universities—some universities see the foundation apprenticeship as being worth one higher, while others see it as being worth two or three.

There is also crossover: at the moment, it is almost a comparative process. The number of people taking HNCs and higher national diplomas in the college sector is dropping. That might have something to do with universities trying to increase their numbers of students at that level: the universities are perhaps dropping their entry requirements and attracting students who, traditionally, would have come through the college sector. That has an effect. In the future, how we work together will be important to ensure no such duplication of qualifications.

There are several good examples in the sector. Edinburgh College has associate degrees that are done with Napier University and Heriot-Watt University. We do the first and second years, which is the HNC or HND part of the qualification, then the students go to the university for their third and fourth years to finish the qualification. Formalising such partnerships would be helpful and could cut out duplication. Students dropping out of an HNC or HND and going into the first year of a degree programme can result in a double cost to the system.

**Douglas Morrison:** I support Scott Warden's comments. We now have an apprenticeship family that stretches from the foundation apprenticeship school-focused, work-based learning programme, through the well-known modern apprenticeship, to the graduate apprenticeship. The FAs and GAs are embryonic in their development; lots of learning is still going on and many changes are being made to try to improve the connection between the apprenticeships and the onwards transition.

Scott Warden raised a key point about the lack of foundation apprenticeships in the operative levels in the construction industry—the trade levels. As it stands, we have a foundation apprenticeship set at Scottish credit and qualifications framework level 6, which is the equivalent of a higher. It is fair to say that that could be positioned as an academic qualification. However, many of the young people whom we target to go into operative level roles take up those roles because they have not connected with academic or scholarly activity. We need more such apprenticeships to be delivered at school level in order to get young people on to a workbased learning programme that gives them a meaningful connection to future employment opportunities and bridges the gap between school and college. That gap is something that can be very difficult for them. I ask that consideration be given to how we integrate vocational training more meaningfully into the foundation apprenticeship.

Lorna Hamilton: I am an employer, as opposed to being from the education side, and we acknowledge that people come into the industry at all levels. The folk who do apprenticeships have historically not necessarily had the academic wish or skill set at school. That can change throughout their lives, so there always needs to be a pathway for them-and there always has been. Sometimes the pathway has been laborious and has perhaps involved juggling of academic institutions so that they were able to take somebody who had gone through an apprenticeship and then decided that they wanted to further their career in a different way, such as by using their qualification to get into the third year of a course. Most employers would support people through that pathway.

It is even more important now because we probably have more mature entrants. A couple of the guys who were here earlier have done something else for a while before doing their apprenticeships. They will bring maturity and will want to move on earlier in their education path to management of some sort, such as being a supervisor. We must make sure that universities and colleges can reflect that.

**Scott Warden:** Again, that is about the foundation apprenticeship model. We do not need to start from scratch: because there is a foundation apprenticeship programme in place, there is a simple solution, which is that the first-year programme of any of the trades could be used as a foundation apprenticeship. It is already in place and can shorten the learner journey. Instead of a four-year apprenticeship, they can do a year in school, which reduces the cost to the employer, and then do three years at the other side. It would be a straightforward fix—there just needs to be desire in the sector to do it.

Jamie Halcro Johnston: I will pick up on a point that was made by Douglas Morrison about his sympathy with careers advisers, who have to have a very broad knowledge. Does that suggest that the model of careers advice has limitations? Could we have a model in which each adviser had a more specific focus? They might work across a number of schools but have a better knowledge of each sector, whether construction or others. Would such a model work?

Douglas Morrison: It could work. Every model has its deficiencies. I am sure that the careers advice service can be improved in many respects. The investment has to come from industry; careers advisers will be better supported by an engaged industry that is invested in connecting and developing the young workforce, as opposed to having sector-specific careers advisers. That is just a personal opinion. There is probably scope for both, but ultimately the solution will come from meaningful partnership and collaboration between the education sector and industrial representatives. The question for us is how to make sure that both key partners are supported to have the conversations and to understand each other's challenges and the opportunities for connecting with our young workforce.

**Jamie Halcro Johnston:** Do you see that happening? What improvements can you see?

**Douglas Morrison:** We are starting to see the structure emerge. The CITB's construction ambassador scheme is an excellent example, in which we no longer just ask industrial representatives to visit a school; they are being trained and supported with literature and advice. The risk of conflicting information from representatives has been reduced.

Construction Scotland is taking a leading role with its engagement and outreach activity, which has become more co-ordinated and specific and has been shared throughout the community. The programmes are fairly early in their development, and instead of looking for the next solution, I believe that there is value in continuing to invest in and support such emerging solutions and to measure their longer-term impact.

#### 11:45

Jamie Halcro Johnston: So instead of Skills Development Scotland skills advisers providing the advice, they would be facilitating or coordinating access to advice for young people.

**Douglas Morrison:** Absolutely. That partnership element is key.

Scott Warden: In a pilot that we are running with the headteacher at Newbattle high school, which is a new school in Midlothian, we have based lecturers in the school two days a week to deliver a formal qualification. The school is being very flexible with the timetables and is looking at doing things in a completely different way; that two-days-a-week entry programme into national construction will expand into а progression award at level 5, at which stage we will have a full-time member of staff at the school to deliver the course to the young people. The same member of staff will also look at influencing first and second-year school pupils by providing taster sessions. Having college staff in such positions could influence pupils and ensure that high-quality advice is given on how to progress through the education system in respect of construction.

The model was piloted last year, with another six schools in the region signing up for next year. We think that the model works for us, given the difficulties of dealing with three local authorities with different agendas. It is just not efficient to ship young people all over the region every Tuesday or Thursday afternoon. Moreover, for us and for other parts of the college sector in which I have seen the approach work very well, putting college staff into schools is probably a very good way of ensuring that we get the right candidates and provide an excellent training experience for them. That kind of joined-up approach and seamless progressionwith an influencing stage at primary 7 and secondary 1, in-school delivery from S2 to S5, tiein to the foundation apprenticeship and on to employment—is something that I think can work.

**Jamie Halcro Johnston:** But you need the schools to be on board for that.

#### Scott Warden: Yes.

Jamie Halcro Johnston: Have you found them to be so?

**Scott Warden:** We have put out the message, and the schools that have come back to us seem to be those that are more proactive and want to do things differently. We are more than happy to work with them on setting up the model.

The model was very successful when it was set up four or five years ago in an area that I used to work in. I should say that it was a different region; the model was also slightly different, because it was dealing with only one local authority—or perhaps two, but they worked very closely together. However, it was on the same lines.

**Dean Lockhart:** What are your views on the impact—positive or negative—on the construction sector of the apprenticeship levy, which was introduced just over two years ago? I see you nodding your head, Mr Morrison.

**Douglas Morrison:** Like many colleges across the sector, we are actively engaged in the administration of the flexible workforce development fund, and we are currently in year two of engaging with not just construction businesses but businesses more generally. We have been surprised—and pleased—by the volume of interest from the various industries, but what has also surprised us is that the focus with regard to requests for training have not, as far as construction companies are concerned, necessarily been aligned with any specific trade, occupation or discipline. Instead, they have been targeted more at management, leadership, ecommerce and how to improve the business.

That has enabled City of Glasgow College to view the way in which we engage with those companies slightly differently and facilitated the development of conversations around business growth and diversifying investment in skills beyond the flexible workforce development fund. This year, with the slight change in eligibility criteria, larger companies in the industry have been considering how they can support their supply chain—through offsetting their allocation of the flexible workforce development fund—to become more efficient and productive, which will ultimately benefit those companies.

We are two years into the programme and lots of learning is taking place. The early signs are that we are now engaging and having conversations with companies, sectors and organisations that we have not had conversations or engaged with in the past.

**Lorna Hamilton:** That is one of the key points. The larger contractors have influence over a huge supply chain, in relation to both supply and subcontracting. In my experience, they provide a good amount of support to ensure that the supply chain appreciates where opportunities, funding and assistance can come from. They are proactive in trying to get those companies to upskill their own businesses.

My experience is similar, in that companies are focused on how they upskill their business overall, rather than approaching it from a trade-specific perspective—it is more about the managerial and safety sides of the business and how they can make it more attractive in one way or another and so more profitable. It has taken a slightly different slant from what was intended; that is not necessarily a bad thing, because that might be what the industry needed.

**Scott Warden:** I agree with what the rest of the panel have said. Most of the funding that has come through the development fund has not gone on upskilling traditional tradesmen. That has been quite a small part of it and the main part has been the management side and the CPD to develop new business processes. As Douglas Morrison said, that is also good and makes businesses more efficient.

However, originally, I thought that the fund would be based on upskilling the workforce in the trades and that has not really happened.

**Dean Lockhart:** Is further clarity required about the training courses or college places that are eligible for the available funding? Is that part of the issue in the sector? Is there uncertainty about which part of the supply chain might qualify?

**Scott Warden:** If I remember correctly, the workforce development fund is not aimed at any formal qualifications. It is put towards bespoke training. It would be helpful if it went towards a formal qualification, because then the people who undertake the training would get a formal qualification on the record, rather than just a bespoke certificate.

**Douglas Morrison:** We work to very strict criteria, which are set by the Scottish Further and Higher Education Funding Council. Feedback from the companies that we work with has been very positive.

Dean Lockhart: That is very helpful.

**Angela Constance:** I have two questions, the first of which picks up on some of the themes that were mentioned by Scott Warden. What more can the Government and local authorities do to ensure that we have a seamless school and college education system?

**Scott Warden:** Edinburgh College deals with three local authorities and that can be problematic because they have different agendas, although they try to work together. For construction, the school-college partnership in the region works on Tuesday and Thursday afternoons. At the moment, we have about 120 school kids coming to the college—that number will change—who are being shipped all round the region. That is not a great system.

I have found it easiest to set up such programmes when I find a proactive school. When I go into such a school, it is flexible in how it wants to deliver its curriculum and timetable, so that it almost becomes a bespoke programme for that school. We have about six or seven schools tied into the programme for next year. If they cannot fill the places as we hope they can, there will be more of a hub-and-spoke system in which other schools transfer other students into the school that is offering the course.

**Angela Constance:** I understand the issues and difficulties that you have described just now and which you described earlier, but I am keen to pinpoint what more local government and the Scottish Government at national level could do to ensure that the system across the country is more flexible and addresses, for example, the promotion and expansion of foundation apprenticeships.

**Scott Warden:** I suppose that it is all about taking a consistent approach. That is what you get with the model that I described earlier, with its influencing stage, followed by in-school delivery by college staff—or, in some cases, students going to the college—and then the foundation

apprenticeship part. Schools want to take that approach and are engaging with it, but the issue is flexibility.

I know that we want consistency, but one size does not fit all. Some schools will be more proactive and happier to have a foundation apprenticeship—or they might even be looking for a university route—but a number of other schools that we are dealing with want the construction route because a very low percentage of their learners go to university. There needs to be a consistent route through the education system at a national level, but with a bit of flexibility in funding to support it. The in-house delivery model is costly for the college sector; indeed, we are almost subsidising it with other parts of what we do. Such pilots are probably not sustainable, and they need to be mainstreamed.

Angela Constance: Continuing with the theme of properly blending and dovetailing our education system, I wonder, given the fact that universities and colleges are autonomous bodies, what other bodies could do to ensure that such provision is dovetailed and not, as you mentioned earlier, duplicated. I would not want the higher education that is available in the college sector to shrink, just because the universities are doing everything themselves.

**Scott Warden:** The college sector is doing very well with the programmes that are in place that take us up to the fourth year in education. However, the waters get muddled when the foundation apprenticeship and associated degrees come in, because that is where universities almost start to compete with us.

The ideal situation for the college sector would be for those students who would typically go to university to do their HNCs or HNDs in college and then to do their third or fourth year at university. As a result, there would be no duplication but a seamless progression. Even if the colleges were delivering only HNCs and the students were going on to university for their second, third and fourth years, it would be good if the sector knew that it was delivering the whole of the HNC course. However, we do not seem to have much control over that, and with the number of students who are dropping out of the HND programme in the college sector to go back to the first year of a university programme, the situation is very difficult. If we needed any help from Government, it would be for it to tidy up those different routes, because it sometimes seems as though students are going backwards just to go into a university programme.

40

12:00

**Angela Constance:** Before I change the subject completely, I wonder whether Douglas Morrison has anything to add.

Douglas Morrison: It is a complex landscape and if the education sector could do anything to support more young people coming into the industry, it would be to simplify it. There are some structural barriers to deal with. For example, Scott Warden talked about the foundation apprenticeship; one of the key challenges in introducing such an apprenticeship in construction is the need for workplace experience. However, construction sites are inherently dangerous places, and the expectation is that a person should be able to demonstrate competence with regard to health and safety practices before they go into such a workplace. We therefore need to ask how we support young people to demonstrate that competence and get them out into the workplace earlier.

Again, the current academic system is very much predicated on linear progression through an academic pathway, and I would like more flexible progression through vocational work-based learning pathways. In that regard, the work of the centre for work-based learning in particular, with its assessments and critiques of different models for delivering such an approach, is of real interest.

**Angela Constance:** I am aware that time is short, convener, but I have a final question for Ms Hamilton. You said that during the recession it was much harder to attract women to construction and that they were more likely to drop out of the sector. What would be useful in encouraging older learners, particularly women, either to return to the sector or to change their careers?

Lorna Hamilton: There are a couple of aspects to that question. In general, the larger organisations will have a returners programme; it was probably created for getting women back into the workplace, but it will also be available to anyone who has taken a career break or, indeed, a break away from a career in construction. However, although such programmes are really good, they are not joined up, and much more of a coherent approach could be taken even on the contracting side of the business and certainly across the construction sector. I am not sure whether that would be best led by local authorities or the Government, but if we look at, say, the 5 per cent club, it started with one or two contractors and is now, slowly but surely, moving across different spheres. That kind of approach could work quite well.

However, although getting returners back to work will without a doubt help with diversity, I return to what Scott Warden said about schools. We need to be in schools, trying to get across the message that the doors are open to women to come into the industry. In Scotland, less than 1 per cent of women are in the trades. I find that quite frightening; having been in the industry for 40 years, I would have hoped that things would have changed by now. It is important that we push that very hard.

**The Convener:** I thank the panel very much for coming in today, and I suspend the meeting for a few minutes to allow the witnesses to change over.

12:02

Meeting suspended.

12:05 On resuming—

## Subordinate Legislation

#### Public Procurement etc (Scotland) (Amendment) (EU Exit) Regulations 2019 [Draft]

#### Public Procurement etc (Scotland) (Amendment) (EU Exit) Amendment Regulations 2019 [Draft]

**The Convener:** We move to agenda item 3, on subordinate legislation. As the regulations are inextricably linked, we will consider them together before making a separate formal decision on each instrument.

I welcome Derek Mackay and his officials, who are Alasdair Hamilton and Mark Richards. I invite the cabinet secretary to make a brief opening statement before committee members ask questions.

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): We currently have three Scottish statutory instruments that transpose the three European Union procurement directives as well as the Procurement Reform (Scotland) Act 2014 and regulations made under that act. Today, the committee is considering two of the draft instruments that amend those pieces of legislation.

The first draft SSI was withdrawn and relaid to address some minor drafting issues identified by the Delegated Powers and Law Reform Committee. It became necessary to lay a further instrument when the United Kingdom Government changed its approach to dealing with international agreements.

The regulations that we are discussing today are designed to ensure that legislation governing public procurement will still function in the event of a no-deal Brexit. The objective is to retain, as far as possible, the status quo on day 1. First, that is because European necessary the Union (Withdrawal) Act 2018 allows for the correction of deficiencies arising from exit and not wholesale policy changes-that point is very important in understanding what we are being asked to approve. Secondly, the intention is to give as much certainty as possible to buyers and businesses in otherwise chaotic times. Thirdly, we anticipate that the UK will be party to the World Trade Organization Agreement on Government Procurement, from which the many requirements of the EU directives arise.

The basics of procurement will therefore be the same as they are today, although public bodies will advertise contracts on a new UK e-notification system instead of in the *Official Journal of the European Union*, known as the *OJEU*. Having one site per signatory is a requirement of the WTO GPA. However, in practice, Scottish public bodies will continue to use Public Contracts Scotland, as is required by the Procurement Reform (Scotland) Act 2014, which will forward adverts as it currently does to the *OJEU*.

Some powers to legislate would be transferred from the European Commission to Scottish ministers. Those would all be subject to negative procedure as they are either simple updating powers or powers that set out the precise conditions under which they can—and, indeed, must—be used, and they offer no scope for discretion or policy change.

In relation to the rights of bidders from other countries, we followed the UK Government's requested approach in the first SSI. The UK then changed its ask and its own approach, which led to the second SSI. The delays to the Trade Bill mean that it is not safe to assume that the powers in that bill can be relied on to implement the UK's accession to the GPA or the roll-over of the EU's other agreements in time for exit. The effect of the two SSIs is to extend the EU's obligations in relation to public procurement for 18 months after exit, by which time it is assumed that the Trade Bill or another piece of primary legislation dealing with the matter will be law.

We have to do this to ensure that our laws are compatible with the UK's international obligations. I am sure that the committee will agree that it is a rather unsatisfactory, sticking-plaster approach. However, it is born of the UK Government's approach to the EU, and our objective is to provide as much stability as possible.

**The Convener:** Thank you, cabinet secretary. The first questions will come from John Mason.

**John Mason:** I have a few questions. It has been suggested that, if that there was a no-deal exit from the EU, accession to the WTO GPA would come—according to a phrase that I have seen—shortly after exit day. Will you expand on what that means? How soon or late could it be?

**Derek Mackay:** The best estimate is about 30 days. The point of departure—the point of accession—would come after about a month. That is the timeframe that we are looking at.

On the wider timeframes, if there was a deal, the transition period would give us two years in which to plan. If there was no deal, the new arrangements would apply on the day after. However, the period of WTO GPA rules is about a month. Again, that is not ideal, but that is what we are living within.

John Mason: That is helpful.

Various public bodies—for example, some health boards—have raised the concern that they would then be dealing with two systems.

Derek Mackay: No.

John Mason: That has answered my question.

**Derek Mackay:** I can tell you why that would not be the case.

**John Mason:** It would be helpful if you could, because those public bodies seem to think that, if they have entered a lengthier, three-year contract under the old system, they would still have to operate under that system but that, within the 30 days, they might also be operating under a new system.

**Derek Mackay:** There will be a switchover, if you like, from the current EU position to the WTO GPA. This evidence session is quite useful in enabling members to raise concerns that people may have and allowing us to correct any misunderstandings.

At the point of transfer, when the new arrangements come into force, those will be the procurement rules that apply. There will not be two systems. If a contract has already begun, as we switch over to the new system, the contract will comply with the new system. In exceptional circumstances, the details of which would be set out, there might be a crossover; however, at no point would we be operating two regimes. We would go from the existing regime to the replacement regime.

**John Mason:** So, there would be a clear-cut switch as far as the tendering and award of the contract was concerned, even if a contract then ran for some time. I presume that that would be less important.

**Derek Mackay:** They would both be important. Procurement rules are procurement rules at the point of advertising and when a body sets about procurement, but I am advised by at least one lawyer and one policy official that what someone has signed up to in the contract is what they would be obliged to stay within. Nevertheless, the rules for how to go about procurement are the rules at that point in time.

Mark Richards (Scottish Government): Yes. The-

Derek Mackay: "Yes" will do. [Laughter.]

John Mason: I will leave it there.

**Andy Wightman:** Cabinet secretary, perhaps you can clear up some confusion. You said that accession should take a maximum of a month.

**Derek Mackay:** We have been advised that that is the rough timescale.

Andy Wightman: I may be confusing two things, but the draft instrument sets the period at eight months, assuming that powers in the Trade Bill become available in that time. You are saying that, once the powers under the Trade Bill are available, it will take one month.

**Derek Mackay:** We are talking about accession and the terminology of lodging the instrument of accession, which is where the lawyers and the policy officials will be helpful.

You are now asking two separate questions. The first is on what the Trade Bill does and the second is on what we are trying to do in terms of the UK leaving the European Union—that is the important point—and compliance with what is necessary under the WTO GPA. There is a gap between our leaving what we are leaving and our joining the WTO GPA, and our estimate of that period is one month. Just to be clear, you have asked a slightly different question.

Alasdair Hamilton (Scottish Government): Last week, the WTO Committee on Government Procurement formally invited the UK to accede. The UK will now be going through its domestic ratification procedures. After that, it will have to lodge its instrument of accession with the WTO secretariat, and the UK will accede to the GPA 30 days after that, assuming that there is no deal.

Separately, we need to implement the requirements of that in domestic law. Given that we do not yet have the powers in the Trade Bill, we cannot do that in our own right, so the effect of what we are doing just now is to continue the obligations on the EU in domestic law. The obligations on the EU will be the same as the obligations on the UK, because we will be acceding on the same basis.

#### 12:15

**Derek Mackay:** The situation is far from ideal and has come about only because the UK Government has not got the Trade Bill passed in the fashion or time that it wanted and the negotiations have not provided the necessary clarity. That is why there is an unfortunate gap. We are trying to ensure that we are competent within an unsatisfactory set of circumstances.

The UK Government might still be suffering from an optimism bias towards getting everything in place in time. I am sure that we will debate that point elsewhere. Andy Wightman: Does the amendment to the amendment regulations extend the period to 18 months purely to give greater flexibility and ensure that the powers are available under the Trade Bill?

**Derek Mackay:** It is not even as exciting as that. I was worried that I would raise members' expectations of what we could do in relation to policy. The statutory instruments do not give us much power over policy and allow us to address only the deficiencies that arise from the bill itself—to fix administrative lists or to address any loopholes or deficiencies in the regulations. We are trying to do that from day 1 of the bill's enactment.

**The Convener:** As there are no further questions, we will move from the exciting part of proceedings to the more formal part, under agenda item 4.

#### Motions moved,

That the Economy, Energy and Fair Work Committee recommends that the Public Procurement etc. (Scotland) (Amendment) (EU Exit) Regulations 2019 [draft] be approved.

That the Economy, Energy and Fair Work Committee recommends that the Public Procurement etc. (Scotland) (Amendment) (EU Exit) Amendment Regulations 2019 [draft] be approved.—[*Derek Mackay*]

#### Motions agreed to.

**The Convener:** Does the committee agree that, in the light of the timing, the clerk and I should produce and publish a short factual report that sets out the committee's decisions on both instruments?

#### Members indicated agreement.

## European Union (Withdrawal) Act 2018

#### UK Statistics (Amendment etc) (EU Exit) Regulations 2019

#### 12:18

**The Convener:** Agenda item 5 is consideration of a proposal by the Scottish Government to consent to the UK Government legislating using the powers under the European Union (Withdrawal) Act 2018 in relation to the proposed UK Statistics (Amendment etc) (EU Exit) Regulations 2019.

The notification relates to amendments that would repeal retained EU laws relating to EU statistics and that would correct deficiencies arising from the UK's EU exit to ensure the continued functioning of the UK's legal framework. That would enable the UK's official statistical system to produce official statistics in the event that the UK left the EU without an agreement to include the UK in the European statistical system.

The notification suggests that it is a category A proposal, which is one that is technical, with minimum policy choice or only one obvious policy solution. Does the committee agree to those matters being dealt with by a statutory instrument laid at Westminster?

#### Members indicated agreement.

**The Convener:** I will write to the cabinet secretary, notifying him of the committee's decision.

#### 12:19

Meeting continued in private until 12:44.

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