



Future is 'depth not
breadth'- Heppell

Finding right keys
to hybrid learning

Destination
Durham 2022

SCHOMS

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Aim to go again as large as life

SCHOMS is emerging from a 'long, difficult and confusing year' with membership intact, partnerships in progress and an eye to lending its influence to wider causes.

Chair Mark Dunlop said that after focusing on developing the new website (see right), SCHOMS would be looking at the next deliverable part of becoming a more sustainable and professional organisation.

Executive member Rob Hyde reported that this could mean championing causes such as:

- ▶ Training – looking at creating a set of training pathways
- ▶ Influencing product design – working with manufacturers on products suitable for AV
- ▶ Promoting and encouraging diversity and equality across the industry
- ▶ To become more sustainable.

"We'd welcome more suggestions on this," Rob said.

SCHOMS membership held at around the 100 mark as Leeds Trinity

and Aalborg University joined.

"We're pleased that the one-year free Covid membership offer managed to maintain and support the engagement of the community," Mark told members.

"A number of universities were being asked to make dramatic cost savings and 14 institutions took up our offer to ensure we retained their membership. We got some full members back as things improved because they wanted to utilise the benefits of the AVIXA scheme."

On a show of virtual hands, members supported continuing the offer for another 12 months.

Enough members also showed interest in attending ISE2022 for Mark to say that SCHOMS would open talks with ISE about resuming a sponsored scheme.

Treasurer Jay Pema reported a £26k operational deficit for the year ending July 2020 – following an £11.4k surplus the previous year.

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Website at heart of new activity

ALL-OUT improvements to the website took up the major part of SCHOMS' focus last year.

Chair Mark Dunlop said the organisation now had more than a website – it was also a member management platform.

The revamped site includes a section on sponsors with links to case studies and key contacts.

"We'll try to do a lot more throughout the year as part of our partnership proposal with them," he said. "We're hoping to see benefits on both sides so I'd encourage members to make sure they have accounts."

Executive member for communications, Jay Pema, asked for views on what kind of information members wanted on the website.

"Would you like cool case studies? Easy solutions? Training information? Partnering events? Or nothing, because we have too much to read anyway?"

Executive newcomer Joan Sheehan said SCHOMS should promote what we have achieved and celebrate successes more.

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Full recordings of presentations and partner sessions from SCHOMS2021 are available in the members' section at new-look www.schoms.ac.uk

The extraordinary future of learning

In a wide-ranging keynote presentation ‘This Next Great Leap Forward’ - internationally-recognised learning, new media and technology leader Stephen Heppell outlined the new directions being forged in all levels of education across the world, not least by his own policy and learning consultancy heppell.net. Stephen is involved in learner-led projects with governments, international agencies, Fortune 500 companies, schools and communities, PhD students and with many influential trusts and organisations.

A NEW golden generation stands ready to take higher education into a fascinating future, according to Stephen Heppell.

It's a generation that, during Covid, went for 'depth not breadth' in learning – and further than it would have done in the curriculum.

He explained: "In the last 14 months I've talked to 103 education ministers or their most immediate civil servants. All of them went through an education system that didn't surprise them.

"When my wife was an undergraduate, she was given a year off in the second year of her degree because one of the final year students had produced an exceptional finals paper that was completely unexpected.

"If you produced a finals paper now that surprised your professors that much, I doubt you'd make it through the first year because there's a marking scheme and a built-in sense of what you're supposed to be doing."

He said that was all going to change and the engine would be the new golden generation of children – just as it was at the beginning of the 19th century with the church and Sunday schools, 75 years later with the industrial revolution and the introduction of compulsory primary education – and another 75 years after that with the Second World War and compulsory secondary education.

Stephen's organisation surveyed what children had been doing during Covid.

"We're sitting on a dataset of many thousands of responses and it's depth



// We're in an interesting place in higher education. . . the challenge is to go where the science is showing us, where the students are showing us //

not breadth. Kids have gone way beyond where they would have done in the curriculum and they're doing it successfully."

He spoke of a school he'd opened in New South Wales which was 'stage not age'.

"You join the school when you like, you go as fast as you like," he said. "When we asked the kids 'at what age do you think you could go to university and study the thing that you love', almost none out of several hundred said they needed to wait until

18. The mean was about 16, some were saying about 14.

"I think Covid let the genie out of the bottle when it came to the artificiality of us imposing a horizontal structure on our learning. The new generation went off to see how far and fast they could go."

So did their families, he added.

In a joint venture with Coursera in Spain, Stephen offered courses to parents as well. 'We said 'we'll pay, whether it's wellbeing for a fortnight or wanting a degree'. We've got families queuing up to be part of it."

The 'horizontal lines' of saying when undergrads should study and go on to do Masters were being 'blown out of the water', he said.

"We're in a really interesting place in higher education. What do we hold that's precious? Scholarship, knowledge, depth. What do we do with that? Historically, ingenuity and invention. Those things are all of value. Accreditation? I don't think it's worth the paper it's printed on. It will be about people swapping the evidence of their learning with each other."

Stephen predicted it would take time for people to realise what was happening. "There was a time when medics would bleed people, even when better hygiene had been invented," he pointed out. "The challenge for us in higher education is to not end up being the barbers of the future – with the pole outside and the bandage and the blood, saying we used to do medicine but now we do haircuts. It's to go with where the science is showing us, where the students are showing us.

"What I'm offering is not the death of higher education, it's the birth of higher education. We finally get to educate the people who wanted to learn at the level we can provide. It turns out to be everybody."

// Covid let the genie out of the bottle when it came to the artificiality of a horizontal structure in learning. The new generation went off to see how far and fast they could go //

'No more new buildings' plea

ASKED how his methodology affected curriculum development and the way others liked to organise education, Stephen responded: "Do not build another building."

He spoke of how he was developing a modeless school in Cork. "You can turn up or not, be online or face-to-face, you'll still be doing project-based work, international baccalaureate, working with a group or team and getting pastoral mentoring.

"We've got people fighting for us to bring our school into their empty office blocks, retail parks, museums or department stores."

The traditional model of 'come to us and that's where our business will be' were in trouble. "Just borrow buildings that are already out there empty," he said.

Future shape of learning – by cardboard

WORKING on a user-led design project, Stephen asked 12-13 year olds in Spain to redesign their learning environment with no budget.

"They created a cardboard interactive screen on the wall and curtained off an area of the room with chicken wire and brown paper. They had 10 iPads - two real, eight cardboard. They had a sense of what learning was going to be like in the future," Stephen said.

But the most interesting result was that their learning improved – any way it was measured. "They arrived earlier, they stayed later, their academic performance went up, the collegiality and mutuality improved.

"They were role-playing future learning. They stood by the interactive screen and talked. Even though there was nothing on the screen – the act of articulation was enough to give them reflective practice. Kids in a cardboard mock-

up of five years hence. Pretty extraordinary."

The teenagers were invited to the university to 'makeover' a warehouse into somewhere they'd love to learn. Built along the lines of their cardboard model, it became the university's most popular space for lecturers to teach.

"It went from an unused building to one we couldn't keep people out of," Stephen said. "A young girl also ran professional development for lecturers and undergraduates in a Skype hub set up with workstations and small tables, allowing groups of no more than eight.

"She taught the protocols of not raising your voice – a 13-year-old who understood it and explained it to all lecturers. The space was so popular with students and lecturers that they were using it before we brought it onto the timetable. We started to learn a lot from that."

ENORMOUS differences can be made to learning by what Stephen called 'the aggregation of marginal gains' – areas in which small gains can all add up to something greater.

He demonstrated a device he'd developed that measured humidity and CO2 in spaces, among many other factors such as noise, light, temperature, the presence of PM2.2 – "the little soot particles you get from diesel" – and volatile organic compounds. "When you take the top off a spirit marker you get that slightly heady smell, that's a volatile organic compound," he explained. The device could detect 50 different kinds of TVOCs.

"We measured 86 different examination rooms in secondary and higher education and everywhere was hugely suboptimal," he revealed. "We did not find one exam room that was not damaging the prospects of some of the children. That's profound.

"If I've been sitting in the hot, dark, badly ventilated side, I'm going to get a mark between 5-15% worse than someone in the bright, cool, ventilated side. Technology meets learning is giving us this data."

He showed how, in a traditional schoolroom, CO2 levels went 'off the screen' within moments of pupils

'We did not find one room that was not damaging prospects of some children'

entering. "Already their brains are at a disadvantage from the physical environment they're in."

Highlighting functional MRI scans from Illinois University on undergraduates taking a maths exam, he illustrated how students who moved around the space before the exam had more oxygen circulating

their brains than students who were in the habit of sitting down to take a deep breath and collect their thoughts.

Recording noise levels at the Fusion building in Bournemouth, it was noted that a group of students caused a big spike as they entered shouting, then got on with their work, raised the level again before and after lunch, continued their work and went home.

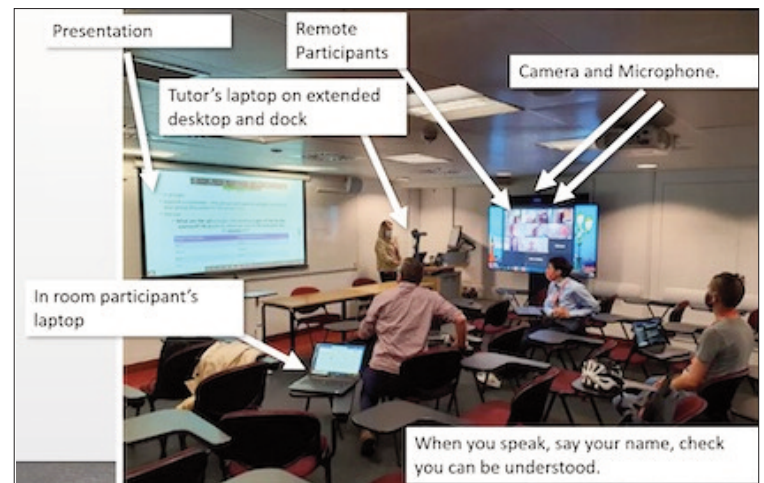
Another group in a conventional classroom came in quietly. "They didn't say anything very much to start with because they're in a seating plan, they've been next to the same person for two terms. Towards lunchtime, the noise started to build. After lunch it was noise, shut up, noise, shut up, noise, shut up, go home.

"What's happening is that students themselves are evoking the protocols, they're part of the design process of the space. They're saying 'this is how our building works, this is what we want to do.'"

During a 'Round Table on Hybrid Learning', Rodrigo Sanchez-Pizani, Audio Visual Solutions Architect Lead at King's College, London, and Chris Pearson, Senior Manager (IT Installations) at Durham University, outlined developments at their respective institutions in response to the changing demands of learning brought about by Covid. Rodrigo and Chris were then joined by Jim Bain, Media Services Manager, Queen Margaret University, Edinburgh, for a question-and-answer session (facing page).

Hybrid learning: testing in the digital playground

Above: HyFlex in action



Working as team comes before the tech



WORKING together was the way ahead for Kings College when it came to designing a hybrid learning method for tutorials and small sessions.

"We brought together a multi-skilled team of operators – AV services and estates and facilities; our research team; the design team and academics. We didn't have students because it was the summer and we were in lockdown," Rodrigo said.

After extensive testing of equipment they opted for a system incorporating a laptop, a dock and a HyFlex trolley.

It fitted the requirements of a scaleable solution which asked little of the teaching staff and encouraged debate and interaction to replicate the 'then and there' while being remote.

Technically, it also delivered on the good quality audio and intelligibility and camera positioning they were looking for.

"It's easy to deploy and in future, trolleys can be used on their own. That's good, we can reuse equipment if we need," Rodrigo said.

Rooms were separated into three tiers according to their size – 10

small, 19 medium and five above 110sq m – and kitted out accordingly.

Advance HyFlex was deployed in a large lecture theatre and three surrounding classrooms.

Rodrigo said that the system had its limitations if room acoustics were poor and that the system they used required AV to be in the room already. An awareness of limitations with chosen software was also needed. "In our example it was the breakout rooms."

While adding reservations about wireless microphones and video-based teaching, Rodrigo said that, overall, their HyFlex experience was not about technology. "It's about people, teamwork and flexibility."

Wide range of options put to the test



IN contrast to the King's College experience, Chris Pearson said that Durham University bought a variety of equipment for people to try. "We then went into lockdown so all the kit has been getting limited use," he said.

One of the main investments was a consignment of Meeting Owl Pro – 360deg cameras with eight microphones primarily designed for the middle of a meeting room table.

"We bought 20 and put them out in spaces, a few got used but we weren't able to do extensive testing."

Chris said that the university had also invested in DTEN Zoom Room webcams, the Avocor WCD 120 degree cam, Rapidmoo Gos and Pros for live hybrid teaching, Sennheiser TeamConnect Ceiling 2 Microphones, Huddly IQ Webcams, Biamp Devio microphones and Poly Studios, an all-in-one sound bar.

"We've put one of everything in with our learning technologists, Durham Centre for Academic Development, in a room called the Digital Playground so people can go in and try," he said.

Chris also gave an insight into Durham's first collaborative lecture theatre being installed this summer – a centrally-managed space with two dual OHP monitor wings and an up-and-down blackboard.

"In groups of five or six, students will have two microphones, so they can feedback and work collaboratively.

"There will be a dual projector at the front with repeater screens and comfort monitors for the lecturers. We're encouraging people to use digital ink because we'll have remote students as well.

"On the output side, we'll be using a quad processor. So appearing on screen will be left projector, right projector, presenter-facing and audience-facing camera. Users will be able to choose their layout."

Round table discussion: pick of the Q&As

Is there any kit that hasn't performed?

Rodrigo: I'm not going to name any brands but we did try a few mikes and a few systems. It's not the case that one microphone is better than another; different microphones are designed for different applications. We needed to take some of the rooms into account. If you use a low microphone and students have moved the chairs, they might end up outside the range of the microphone. It's one of the things students do, they rearrange everything and that stops it from working.

Asked if they had been given a clear steer on hybrid learning priorities, Chris said: "We were definitely aware of the problem and we were asked to try and find some solutions."

Jim said: "No clear steer at all. We were presented with the problem as seen by senior management and course leaders. We tested some solutions and we're using a mixture."

Rodrigo said: "Yes and no. The main criteria was to try to extend the online experience but no clearer steer than that."

What has been the student feedback from the far end?

Rodrigo: So far better than the students in the rooms. One of our main complaints is audio quality. Microphones will help a little bit but there's no 'silver bullet'.

Jim: Remote students really liked the experience according to a survey by our student union. There were a few who had bandwidth limitations and some said they were getting audio feedback. That's because they didn't have a headset. They'd got a microphone and speakers live – that's a training issue. But it's highlighted that a lot of students would prefer a mixed method of delivery. It would enable us to increase the number of students without increasing the size of the estate.

Chris: Durham has said that, in the next academic year, anyone can join remotely if they want to. We're not expecting all international students to be able to come back in September, hence the Owls roll-out to make sure at least there's something available in each space.

How do you make the studio rooms scaleable in terms of user ability or complexity and was there any strategy in getting users to engage with these technologies?

Rodrigo: The studio rooms are not a one-push button, some of the AV team set up the system and leave people to do whatever they need to do. We created accounts on the dummy so they have a device licence to use the computer and that's very much it. Instructions are one of the big challenges, we've put them in each room.

Chris: We've done a couple of user training sessions

but the equipment is very intuitive. It falls to us or the IT team to give basic support to start off with. We've also produced a one-pager guide but in reality people usually want you to go and hold their hand.

Jim: We repurposed three group study rooms to use as staff recording spaces. We produced written materials that we put into the rooms and some videos that we put online, I think most of the staff did them. Our Technology Enhancement Learning team also conducted individual training sessions for staff. The calls on us haven't been great. They were initially but dropped off because people are really comfortable using them.

Chris: That's part of the reason there's been a low take-up. People are so used to working with Zoom and Teams. You can start on your own or go straight into the Panopto client. They are used to this quality and think why bother going into the studio to get better quality cameras or light.

Have academics had any preferences towards Zoom, Teams, Collaborate, Panopto, Webcast?

Chris: At Durham most teaching is on Zoom or Blackboard Collaborate and most of the professional meetings are in Teams. The university was open to having all available so therefore we have to support them all.

Rodrigo: For us it was a top-down decision to use Teams. You can have a Zoom call but if it goes wrong, you're on your own.

Jim: We're a Microsoft house, Teams was the default position for meetings. Most of the live teaching was done with Blackboard Collaborate.

Asked about the effect of reflective surfaces on acoustics, Rodrigo said: "With captions, the difference between being in a reflective area and being in a controlled space is the difference between getting about 20 per cent of the text right and 80 per cent right. Having a well-calibrated microphone and low reflection is definitely very important if you want to get good captions."

Can giving students the 'in room' experience be achieved?

Chris: I would say no. You can provide audio, video and the content to students but everyone knows being face to face with someone is best – the body language, the way you pick up on little things – we rely on human interaction.

Rodrigo: Why do you want to? It's like having a hybrid football match. We watch a match on TV and we go to the stadium, the two experiences are completely different. You watch at home because you have certain facilities there or you go to the stadium for the ambience but you don't actually want the two to mix.

PICK OF THE Q&As

How many reported AV faults are resolved without your team having to visit?

Per: I don't see the results but I imagine around 80-90%. If staff call out a case they can't solve, we go to the classroom and show them how to do it, so there's a bit of teaching involved. Our IT service desk tests all our classrooms twice a year. Mostly it's broken cables that need to be fixed.

What lessons can be learned from content creators on online platforms – especially in terms of interactivity and quality?

Per: Interactivity is difficult. We have to help teachers not be afraid of the systems. We take care of the equipment, you do your teaching.

When we were completely online during the first lockdown, one of our professors did an online studio recording, formally dressed and with all the right lights and audio. Later in the semester, he didn't have time to do that. He did a recording in an airport with his iPad. You can imagine the poor audio quality and no video. Students said they preferred the airport recording because it was more relaxing. So we don't have to put up the right lights. The audio has to be really good, the camera is important, but the presenter doesn't have to be stiff, he has to be talking as if he's in the classroom.

What do you see the challenges being for your university in the coming year?

Per: All universities in Denmark are public and rent spaces from government and have to save money. One way to do that is to optimise space. We are also talking about extending our 8am-8pm teaching timeslot and doing semesters completely online.

300+ classrooms, three campuses, the Danish story



AV manager and new SCHOMS member Per Mouritzen is responsible for classroom design at Aalborg University, Denmark. He is one of three AV specialists in a centralised IT/AV department looking after 300 teaching spaces – including 28 specially-built distance learning classrooms – between the campuses of Aalborg, Copenhagen and Esbjerg. His focus is on system design and larger project management. He has been at Aalborg for 20 years.

A GOVERNMENT evaluation verdict that either Aalborg University fixed its AV, especially the distance learning, or lose some of its education provided a testing backdrop for Per's first teaching space designs.

His prototype was a simple layout of seated students in a classroom with a screen on the back wall showing the 'far end' teaching too.

"We did this campus to campus," he said. "A teacher in Aalborg was teaching students both in Aalborg and Copenhagen.

"This was the design in all 28 distance learning classrooms. I also worked with a professor to do some pedagogical courses for the teachers on how to use the systems."

After attending what was then an AVIXA presentation about contrast ratio by Chuck Espinoza at ISE, Per gained CTS qualifications and started to look at how he could improve the system further.

"We hired in some students to measure the rooms using AVIXA standards. First we looked at the sizes of screens, then we looked at contrast ratio – 80% of classrooms did not fulfil the requirement. I went back to campus service and told them we need to adjust the light.

"Now we are down 20% of classrooms that are not perfectly OK."

Their checks on the height and viewing angle of screens revealed that few adjustments were needed.

Today, all classrooms are exactly the same throughout all the campuses. "Same cables, same panels to turn on the projectors," Per said. "It's not very

flexible for a few people but it works for the majority.

He said all auditoriums and small meeting rooms also had the same designs. "It makes it really easy to use. We have VLAN for all of our AV equipment and we have created a home page where each service desk can see the rooms they're responsible for – a red, yellow or green status to see if it's OK, partially OK or completely broken.

"Our support in the first semester after introducing it went down by 20% and is still going down because we started monitoring the systems."

Per said collaboration with campus service was important because they made the decisions on furniture for the classrooms.

"We have separate electricity for AV and power outlets in all the tables," he added. "It has been a good collaboration with them."

He also appreciated being involved in project planning right from the start.

Per is now collaborating with the university's Centre for Digital Supported Learning to share knowledge. "They know a lot about pedagogy and can inform on how we're going to teach with Zoom or Teams or whatever."

He was also looking into providing more mock-up teaching spaces and testing some hybrid learning spaces.

According to a survey at Aalborg, while most teachers preferred a return to face-to-face teaching when courses resume in September, students opted for hybrid so they could stay home and still follow the teaching.

A COMPREHENSIVE, highly searchable and available repository of spaces – that’s what Dr Lisa Stephens says FLEXspace aims to provide.

Her colleague Dr Rebecca Frazee gave SCHOMS21 a virtual tour of the ‘very visually oriented’ site which features 700 different spaces from campuses around the world.

“If you’d like to get ideas for a space, find out how others are using a particular type of camera or microphone, whatever it might be, you can search, browse and filter on all kinds of specifications,” she explained. “You can consume or contribute content and multiple people from your campus can be editors of your entry.”

Clicking on an image gave users access to all the details and specifications of a space. “You can upload as many photos as you want, detail the design rationale, describe why was the space created, what is it intended to do,” Rebecca added.

“There are all kinds of details in terms of the technology in the room, the flooring, seating, lighting, temperature control, different types of furniture.”

Additional information could be added such as PDFs, spreadsheets, Powerpoint slides, protocols, procedures and student surveys.

It was a great way to connect with others at different institutions, Lisa said. Idea boards could be created and presented from the site as an alternative to sharing Powerpoint slides.

“We curate galleries – for example, we know that people are interested in hybrid learning spaces. You can search ‘hybrid’ or go into the galleries where we’ve started collecting examples.

Improving learning spaces worldwide



Dr Lisa Stephens (left), Assistant Dean of the University at Buffalo and Dr Rebecca Frazee from the faculty in Learning Design & Technology at San Diego State University took SCHOMS21 on a virtual tour of the FLEXspace website – a resource for AV/IT and systems integrators, facilities and campus planners, learning designers, and faculty developers to help ideate, benchmark, prioritise, plan, design, and assess learning space projects.

“In addition to spaces, we have an area called toolkit. These are the resources that might help you to plan or assess a space.”

Lisa said that FLEXSpace and the integrated Learning Space Rating System (LSRS) planning could identify common solutions for learners.

“We all know what it’s like going into an advisory group meeting with a number of people from campus sitting around saying we’re going to make some investments. There are faculties

that can feel, compared to others, they’re being slighted.

“Our tools can be brought to bear among advisory groups. They help you to refine and prioritise where you may need to make some investments in spaces. It starts to remove the fear about how the budget is going to support various places.

“With your advisory group you’re not just starting a conversation, you’re starting with some hard data – saying ‘this is what we know based on the learning spaces review system.’”

She suggested giving everyone around the table a FLEXspace account. “Go and find rooms that you’ve been to, find classrooms that you’ve been in or that you know by reputation are slick rooms, rooms you’d like to see built on your own campus.

“When everybody does that, you’re beginning to look at the attributes of those spaces – it’s all done on a private ideas board, people can bring the classrooms they like into the space and start discussing it. You’re starting to align the priorities with the pedagogy.”

Planning is underway for a dedicated FLEXspace workshop to enable SCHOMS members to showcase best practice and utilise the benefits of the FLEXspace partnership – watch this space.

‘Think of LSRS as a quantitative measure, FLEXspace for all the qualitative elements’

LISA and Rebecca explained how FLEXspace could be married together with the Learning Space Rating System (LSRS) to serve as ‘a terrific way’ to consider strategic planning and ideating for learning spaces.

“LSRS is a free tool for you to assess your own spaces on campus,” said Rebecca. “Download a spreadsheet and a scoring handbook from the Educause website. It gives you the quality elements that need to be in the space.

“Take these benchmark best practices and rate all the different elements of your space.”

Originally a measure of the ability of the space to support active learning, the system had now evolved to consider informal learning or different kinds of interactions. “It’s by educators, for educators. We’re integrating LSRS into FLEXspace. We’re thinking about how you could give a score on LSRS and then load up all of your photos and specifications – and all the evidence of documenting that space – onto FLEXspace.”

Lisa added: “Think of LSRS as a quantitative measure, think of FLEXspace for all the qualitative elements.”

OVER nine years of auditing spaces at the University of South Australia, the method has evolved from Excel spreadsheets to web php to the mobile app of today developed by Daniel Caruana.

"In 2020, with the lack of teaching physically on campuses, we saw the opportunity to improve processes, information management and capabilities," said Marek.

Two of the primary apps that Daniel developed were for AV auditing and creating a room database. Following the success of those, Marek said they had started work on other applications:

- ▶ Replacing the university's handset phone system with a web app
- ▶ PC Virus check app
- ▶ Campus support service call triage and auditing app (in development).

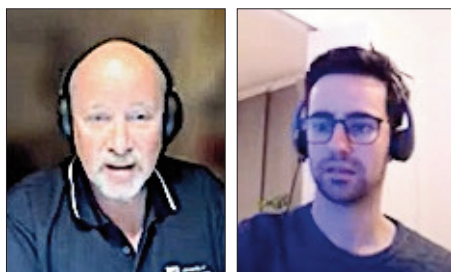
▶ Home Assistant – AV Equipment Reporting Dashboard
AV auditing

"The idea was to have auditors check the rooms one at a time, answer a few questions about the rooms and if there were any issues, have a way of logging those and looking into them further with our core AV team," Daniel said.

He developed the solution using the new Microsoft power apps



Monitoring AV: apps the way to do it



Marek Pokorny (left) and Daniel Caruana from the University of South Australia demonstrated how they've developed PowerApps and PowerBI to help in-house AV control and management.

platform. "It's similar to web design, there are a lot of pre-made elements and actions.

"It has an easy-to-use interface which you can then publish and it can be used in web browsers."

The app worked by users selecting the campus they are on and being shown a list of rooms. These could be grouped according to locations to save time travelling between them.

"We can flag some rooms to be high priority spaces. The app also records the date the last audit was completed."

When a room is audited, it drops off the list to make sure information is kept current.

The questions asked of auditors are linked to the university's room management system and other asset databases.

"If we tick a room as having microphones or a lecture recording system, the questions that come up link to what features that room has – it

means we don't have to manage a different set of questions for the room."

On completion of all the answers, auditors create a ticket in the service management system. They can also describe and categorise their issue, add photos, special instructions, alerts or reminders and escalate a problem by email if necessary.

"We can look at a report and see a room has had five issues in the last month. If so, we can go back and look if there's something deeper we can resolve," said Daniel.

AV room database

The aim of the AV room database was to achieve improved asset management, according to Marek.

"In AV spaces we know there are lots of moving parts that aren't captured through Cis and CBDs and that need replacement in time.

"We wanted something that would allow us to do that but also tie back into our mainstream systems, allow quick and easy updating as equipment is added or removed. It would make budgeting and forecasting less complex and improve reporting in general."

Daniel said the database app tracked hundreds of rooms and thousands of pieces of equipment. All of the equipment that has been added to a room shows up when users click on it.

The app had three components – a front end, again based on PowerApps so it can run on web browsers and phones; a database and reporting through Power BI.

"Data is mostly based on SharePoint online lists," he explained. "It gives us a dynamic data source to do queries on and bring into multiple places like Excel and Power BI."

Daniel added that photos and thumbnails could be stored in document libraries.

"It creates dynamic reports and drills into your data," Marek summed up. "All that we've demonstrated with Power BI and data coming from other different sources has changed the level of regular live reporting that we can achieve."

Life in project management fast lane

In his presentation 'Covid Through the Rear View Window' Barry Dickson, Project Management Office Manager, Queen Margaret University, Edinburgh, used driving analogies to help people evaluate what happened "to us, with us and through us" when the pandemic hit



The look out the front window – pre-Covid

MUCH of the IT infrastructure and AV across the campus at Queen Margaret University had been replaced and there was a focus on how space was being used on a single site, Barry told SCHOMS21. "We were looking forward to a roll-out of an MS teams trial. We had an agreed route map for the next year or two for IT development, applications and kit. We were in **cruise control**."

Hitting the stop sign

With lockdown, the whole university had to pivot quickly. "The IT projects stopped, we couldn't get contractors or our own staff on site. We had to reorganise the staff into remote working without enough lead time to provide laptops. Both the academic and professional staff had to rethink how the teaching and learning environment was going to work.

"We identified the **boy racers**, the technology early adopters who were going to jump into the car and zoom off; **learner drivers** who had avoided training or were trying to do things the way they'd previously done; the **cyclists and motorcyclists** who were agile but also vulnerable because they lost support and protection; **lorry drivers** who were carrying heavy workloads but didn't have the home environment or the right kit or good enough internet connection to cope at home. Senior managers had to empower staff to become more innovative and make decisions on the hoof. This was quite a cultural shift and I was seeing a **Spaghetti Junction** of initiatives, everybody was empowered and trying to be innovative but they hadn't read the map, they had no thought or training about how this journey might go. They were in the middle of chaos."

Calling roadside assistance

People needed **driving lessons** to change their paradigm to cope with the new working and learning environment. The Project Management Office (PMO) stepped in with various tools. "Normally, planning for universities is an annual cycle with lots of time to look ahead but this time there was no tracking in real time of all the innovations and shifts," Barry said. "We convinced the management team to drive the

whole scenario through MS Teams because that meant people had to learn about it quickly. Panopto became flavour of the month as lecturers had to consider how they were going to deliver from home. Suddenly training became an interesting point. Use of space came to the fore. We had a lot of empty space and the wrong kind of space. A lecture theatre that previously held 200 people could now only hold 30. Classrooms that previously held 30 could now only hold nine. We had to adapt quickly. We had to encourage staff to use their own devices from home which threw up the support challenge. How do you support people whose kit you don't own or know or what they've got on it. Home internet provision became an issue."

Looking at the map

Looking at some of the assumptions they were making and scenarios they wanted to consider, the PMO asked staff to address them as part of their day-to-day work. "We came up with a high level map, breaking down work into eight critical streams, each with a full audit trail and an escalation procedure for getting key points back to the Senior Leadership Team," Barry said. "That paid dividends."

The traffic warden approaches!

Barry said the auditors had arrived and were now **kicking the tyres** – "they know it's a car, they know they need to look profound but to be blunt, they don't know what they're looking for. They've never been in this situation, they need to ask lots of questions." Interestingly, the communications channels came under scrutiny. "What we saw as the key channel was not being engaged with by most staff, we had to realign that. A learning process for the whole university to understand how it communicates with staff and students."

The journey continues

The **traffic** is building again, according to Barry. "The projects are starting up and the good news is that people have started to embrace the discipline of project management. We also need to look into the **rear view mirror** to see what we actually learned. What did we change that we need to retain? We shouldn't go back to the old way of working because some of the new ways have worked really well. And we need to get ready for the next pandemic. If it's not a pandemic, it will be something else that will challenge us significantly. If you're old enough to know the adage – you **do the mirror, you signal and then you manoeuvre**. Hopefully as you go into the new academic year you're fit for purpose and will join successfully on the journey and we'll all reach our destinations."

// We need to look into the rear view mirror to see what we learned. We shouldn't go back to the old way of working because some of the new ways have worked really well //

Destination Durham 2022



PLANS are being made for the long-awaited return of the person-to-person SCHOMS conference.

After two years of Covid-enforced virtual conferences, there are hopes that members can be welcomed to Durham University for SCHOMS22.

Executive member Chris Pearson said that the conference and partner exhibition could be hosted in the university's new £40m flagship teaching and learning centre.

Adding some technical background, Chris said: "We went for a full SVSI (video over IP) installation. The centre is full of tech, full of gadgets, including our biggest lecture theatre – 500 seats, two five-metre wide projectors onto a giant screen, all set for lecture capture."

He also hoped to offer some tours around the UNESCO world heritage site neighbouring the university, which has 17 colleges.

Aim to go again as large as life

continued from page one

"Things could have been worse," he said. "We'd already anticipated the cancellation of both ISE and the SCHOMS conference and how that would affect us.

"Cancellation of our in-person conference really does cause liquidity problems for us but we were able to suck up the losses and we just have to think where we're able to go from here."

Mark said that SCHOMS had continued to work productively with AETM, FLEXspace, Media & Learning and CCUMC.

"We're continuing to build our relationship with AVIXA to try to leverage benefits of CTS scheme," he added.

Executive member Adrian Brett confirmed it had been a quiet year for bursaries and awards. "Two bursaries are still running and will come to completion as and when they can," he said. "We're looking to consider what bursaries we can release for November time.

Details of how to engage with bursaries and awards have been updated and put on the website under the CPD section."

Joan and Graeme step up as Jim set to stand down

SCHOMS has welcomed a new member onto the Executive Committee for 2020-21.

Joan Sheehan was nominated and appointed without election as Jim Bain revealed he was standing down.

However, Jim is not disappearing immediately. He will be a co-opted member until early next year to help a smooth transfer of his responsibilities.

- Chair – Mark Dunlop, University of Dundee
- Vice-Chair – Caroline Pepper, University of Birmingham
- Treasurer - Jay Pema, Cambridge University
- Secretary - Chris Gooch, University of Leicester
- Bursary Scheme – Adrian Brett, Anglia Ruskin University
- Rob Hyde, University of Bath
- Chris Pearson, University of Durham

● Joan Sheehan, Leeds Beckett University

Co-opted members:

- Jim Bain, Queen Margaret University, Edinburgh
- Graeme Bagley, Nottingham Trent University

Supported by:

- Administration and conference planning – Catherine Cadogan
- Accounts – Julie Lawrence
- Connections newsletter – David Knight

Full recordings of presentations and partner sessions from SCHOMS2021 are available in the members' section at new-look www.schoms.ac.uk