**Assessment Symposium 2021 - Session 4.mp4**

**Prof Judyth Sachs** [00:00:59] Good morning, everyone, and welcome to our Studiosity Symposium. And can I say, I hope all of us who are in lockdown across various parts of the world are managing, and managing to be positive every day and see that, in fact, they will be at some stage, hopefully, a light at the end of the tunnel. I want to acknowledge that I am hosting this online conversation from the lands of the Gadigal people of the Eora nation. I pay my respects to elders past, present, and emerging, and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of New South Wales, and elsewhere in Australia, as well as the broad expanses of Canada. Over 500 people have registered, which is a great number of people, so clearly assessment is something that people are interested in.

**Prof Judyth Sachs** [00:01:48] Assessment is a challenge, but it's also a central responsibility to what we do in any education setting. COVID as brought particular challenges and require that we ask questions like, "what is the purpose of assessment?" "What are we assessing?" and "Where does learning fit into this discourse?" And today we are posing some of these questions and others to our expert panel. So the session today is organised around an introduction five minutes, but I'm not sure that it will last that long. I will then ask each member of the panel questions that relates to their expertise and experience. Questions then will be taken from the audience. And finally, I will try to bring the session together at the end. The symposium will be recorded for others to listen to later. So before we get to the questions, can I ask each of you on the panel to provide some background on your experience regarding assessment in higher education? I invite Julia Christensen Hughes to speak first.

**Prof Julia Christensen Hughes** [00:02:47] Thank you so much, Judyth. And it's a real pleasure to be here. And I just similarly want to acknowledge that I am coming to you from the ancestral lands of the Attawandron people in the treaty lands and territory of the Mississaugas of the Credit. And here we recognise the significance of the Dish With One Spoon covenant to this land and offer respect to our Anishinaabe, Haudenosaunee, and Metis neighbours. So my background, just very briefly. I've been in higher education for over 30 years and many of that in various administrative positions. Currently, I am the President of Yorkville University and I want to send a particular shout out to to my Yorkville colleagues. Delighted that you're joining the call. In a former role, I was Director of the Teaching Centre at the University of Guelph. And during that time, I was also President of STLHE, the Society for Teaching and Learning in Higher Education. And there I initiated what became known as a pan-Canadian study into academic misconduct. And I really learnt a lot through that. I collaborated with Don McCabe that many of you will know who founded the Centre for Academic Integrity. And I garnered a number of really powerful insights into some of the challenges that we really need to address with respect to assessment. And I'm currently working on a book with Sarah Eaton from Calgary, doing a 15 year update on some of that thinking. I just also want to very briefly share that I'm passionate about the need to revisit learning outcomes. I think that's where we need to begin the conversation. Is what are we really hoping to achieve through higher education? What do we want our students to learn? And how can we use assessment as a really authentic assessment, as an effective strategy to direct their attention and help them enhance their skills and develop values that are required in the world today?

**Prof Judyth Sachs** [00:04:53] Thank you. Thanks very much. Sorry, Julia. Merlin. Can I invite you to talk?

**Prof Merlin Crossley** [00:04:59] Thanks very much, Judyth. Hello, everyone. Yes, I'm in Gadigal country in Australia in somewhere often known as Sydney. So I'm Deputy Vice Chancellor, Academic at the University of New South Wales in Sydney. I'm a biologist. I've worked for 30 odd years in the sector. I'm now responsible for students and their teachers. During my career, I've loved every part of my job, but I love teaching. But, you know, we all talk about 'learning and teaching'; it's become 'teaching and marking'. And I've seen assessment - because we can do more, we do do more. And I've seen assessment proliferate. And as we move to mass education, I've seen it become impersonal, and I've seen the burden on the students increase. But with COVID, there's been this time of natural disruption rather than human-led disruption, and I think we're at a fork in the road. I think we've got a choice to do less assessment, re-ignite a love of learning, and use assessment only when required, not as a stick to beat our students. I feel like they're now like medieval monks working on an expensive manuscript, terrified of blotting their copy book at every single moment of every single day with continuous assessment. And I'm hoping that in COVID we'll- I think because we can't control assessment as we did, I'm hoping things will change. Thank you.

**Prof Judyth Sachs** [00:06:46] Thank you, Lynn Bosetti, also from Canada.

**Prof Lynn Bosetti** [00:06:51] Well, greetings from Canada. My name is Lynn Bosetti, and I want to acknowledge that I am coming from the unceded territory of the Syilx Nation in the Okanogan. I have been a Dean at both La Trobe University in Australia and at UBC, University of British Columbia. And I also spent 21 years at University of Calgary, where we were involved in a massive, innovative approach to restructuring teacher education. And it was astounding what we accomplished, which really involved a very different approach to assessment and a philosophical approach that we adopted to, to learning. So it was learning to learn and learning to teach.

**Prof Lynn Bosetti** [00:07:38] Currently, I am doing research on incivility and bullying. And so part of that comes from the kind of changing context and the changing role of the university. And I think really what's happened is that there is a shift in an acknowledgement of where knowledge resides. And so the Professor is no longer 'sage on the stage', and that students actually bring knowledge to them. So I think it's really shifting how we relate students and how involve them in their learning. And I think it also relates to an acknowledgement that as a university, we're no longer the ivory tower and that society, government, business, and industry are really looking to us to graduate students that are not only competent and have the desired skills, but also that we look at their aptitude and disposition. So there's a shift to wanting to graduate students that can engage in moral reasoning and ethical, moral and ethical reasoning. So it's created some shifts into the role of the Professor and the role of universities. So that's where I'm coming from.

**Prof Judyth Sachs** [00:08:54] Thanks, Lynn. And finally, Claire Macken.

**Prof Claire Macken** [00:08:59] Thanks, Judyth, and hi, everyone, great to see you. I'm on the land of the Wurundjeri people of the Kulin nation, and in Australia right now, wattle is blooming, which is the beginning of spring. And it's such a wonderful reminder of the connection of the Indigenous people to the land we're on. So I'm Professor Claire Macken, Associate Deputy Vice Chancellor, Learning and Teaching, in the College of Business and Law at RMIT University. And in terms of my, I think I'm pretty broad in terms of looking, after all learning and teaching in the college. But I particularly focus on curriculum design and learning technologies and the connection that we have with industry, and like UNSW, RMIT is an absolutely huge university, over eighty thousand students and in the college itself is over thirty thousand students. So absolutely enormous. And unfortunately, some of my time is spent on academic integrity issues. And I know that my colleagues as Deputy Deans also spend a lot of time in hearings on academic integrity related issues. And it really makes me think, can we make it better? Why are students breaching academic integrity? Why do they feel a need to actually cheat? And what can we do about it as educators? I'm also a student at the moment, so I'm studying and looking at studying from the lens of being a student is fascinating. And I can tell you what's intensely annoying as a student, when you come to assessment, for example, mild changes to assessment at the last minute, penalises students who have already done the assessment ahead of time. I'm also obviously an academic and I've been a teacher, so I've been on the other side of the table and now as a academic manager. And so I think COVID is a game changer and I hope this comes up today. I think it's time for a massive change. I think it's time we got rid of exams. What are they doing? Really? Do we really have to have exams anymore? And can we start explaining the purpose of assessment and why it's important to students? Thank you. Thanks, Judyth.

**Prof Judyth Sachs** [00:11:06] Wow, what a radical. So, not surprisingly, the first question that I'm posing to the panel does relate to COVID. So the question was, while COVID-19 has challenged the delivery of education programmes and required universities to be agile and responsive, to what extent has the purpose and nature of assessment been challenged? And if so, how? And if not, why not? Where do you think it can be improved and what gets in the way of innovation? So who'd like to start off responding to that question? What about if I asked Julia? I learnt when I was doing a review in Canada, I learnt a new word and I was reviewing the faculty at Alberta and I thought, oh, thank God I'm not having to chair this review. And when I got there, I was "volun-told" that I would be chairing the review. So Julia, you're going to be "volun-told".

**Prof Julia Christensen Hughes** [00:12:09] OK, thank you. So a lot of the courses and programmes we offer at Yorkville are online. So moving to online assessments other than in some specific programmes didn't change a lot of things for us. And so I would say that we were already innovators in this space. And I'll just give some examples. And I this will be reinforcing what Claire's saying about moving away from exams. Right. And back to this notion of authentic engagement with assessment. And so, for example, we have a Master's of Counselling programme where an assignment is to engage in a counselling exercise and to have that video captured and then to have that critiqued. So that's the kind of assessment that is natural to the skills that we are hoping that our students will develop and, as well as the attitudes and the values. So showing empathy, compassion, active listening. Right. So you can you can bake into your - if you're learning outcomes are clear, you can come up with creative forms of assessment that that move so far beyond that traditional exam. But I would say that where we really had to pivot was in our BBA programme, for example, where we do traditionally have on-campus students. And we're there for, you know, pivoting to the online learning environment. And one of the things we did in exams that I really appreciated was in numeric questions, have random number generator. So sort of the framing of the question is the same, but each student is actually getting an individualised question. We certainly didn't go with one of these massive exam invigilators, which I've read a lot about in my work with academic integrity, really concerned about how they'd disadvantage, racialise people, for example, where the camera can have a lot of false positives or really are seen as invading the privacy of students. So we didn't go that route. But so maybe others can speak to that. Yeah. So I would just say like this, this was a direction we were going in any way. We already had a lot of bench strength in online learning assessment and were challenged to do more of that. But I would say that's an area of strength for us.

**Prof Judyth Sachs** [00:14:45] OK, Merlin, can I - given that you're on top of Julia on my screen.

**Prof Merlin Crossley** [00:14:51] Yeah. So we found that there was more cheating in exams and students, I think who otherwise would never have cheated got caught in chains of cheating. So what would happen is someone will get a text from their friend saying, you know, I can't do number 4, what do I do? And then it would explode and it would get one student, two students, three students. It would become like the Tour de France, where then people thought, everyone's cheating, why won't I? And then the law student would report absolutely everyone to us. And so we have this tragic situation where, you know, the 97th person cheating, I think I sort of felt that otherwise honest students were getting caught in cheating. We said, why do we have exams? And the answer was really interesting. The people in the humanities and social sciences said, what are exams? We don't have them. And people in maths said, hey, it took us so long to do this sophisticated maths question. It takes longer to set a good exam that it does to do it - we've got to have them. And we're having this debate. So I think, and also remember, as Claire said, we've got a lot of students. And so we had also done this group work thing and the students had mixed views. They love some group work programmes, but they hate group assessments because they feel it's out of control. And whenever people feel out of control, they feel anxious. So we're tossing the whole thing in the air and we're trying to get insights from the people in the numerical subjects, and the more written subjects. And I love, Julia, I think your answer of, y'know, changing the numbers, that's one of the things which is a good fix for some of the numerical subjects. Thank you.

**Prof Judyth Sachs** [00:16:52] Claire. You've got the volume in your faculty. Do you want to give us your response to that question?

**Prof Claire Macken** [00:16:59] Yes, so I think the question about what gets in the way of innovation, I think there's a lot of things. But workload concerns, academics tied to evaluation scores. So "I can't try something new, because I'll take a dive in the evaluations", and there's too much hanging on that evaluation score. But also marriage to the old ways. So the exam as a product of the 18th century Chinese approach - here's a nice quote from an article on it where "in the Chinese system, it took place within huge walled enclosures, inside of which were thousands of small brick cells laid out in straight rows like the houses of a town, and each cell contained a bench and a table and housed a nervous candidate." And I just think of maybe in the online environment today with COVID, are we replicating these cells of individuals sitting at their computers busily going away with their assessments? Something that Merlin said as well around cheating and the convenience of cheating. I think it's easy when you've got multiple ability to quickly Google an answer on your screen. A student that probably wouldn't have done that before is thinking, well, is this cheating, is this not cheating? And some of the examples in social media forums, in some of our hearings, students would say, well, the whole class is cheating. And you'd look at the - they would give us the documentation and there's the like, Frankie, AngelKey, and Typomatic, as the names of the students. So we don't know who these students are. They're just pseudonyms. So in terms of trying to identify who is the culprit behind cheating in mass social media forums, it's it's not easy at all. So I think what's happened with this shift, with COVID, it's actually opened up a whole new conversation on what assessment actually is and what we should do with assessment. And I hope in a good way.

**Prof Judyth Sachs** [00:19:08] Lynn.

**Prof Judyth Sachs** [00:19:08] Thank you. You know, I think COVID has been - there's some really good things about COVID that has really changed our practises and provided new opportunities for us as educators. And one thing is, is that so often professors are so focussed on the content, on designing their curriculum and the content. But now when you're teaching online, we have to worry about the learners' experience and keeping them engaged. So there's been, I've seen lots of innovations in thinking about how do we assess students. So when you work on a platform, a delivery platform, so we use Blackboard at my university, but there's others; as the instructor, you have so much more opportunity to create communities of learning and to have learning buddies and and have group work, because it's really easy to put people off into little rooms and create time for them to work like that. Now, I think that works out really well in professional faculties and in the social sciences. I know in science there in the science areas, it's difficult because often you have large lecture sizes and there's a lot of accreditation issues.

**Prof Lynn Bosetti** [00:20:24] But what I've see in innovation is that as professors, you don't want to be losing your students. And you can see everybody I don't know, I've never taught in a class with a hundred students, but you want to keep them engaged. So what I have seen as some innovation is video exams, or periods where students have to take responsibility for providing evidence of their learning, of meeting the standards, of meeting the learning objectives such as portfolios. And then there's conversations where they have to demonstrate or talk about their learning. I think in the social sciences in particular, professors have been encouraged to try some more innovative assignments where they can use podcasts, they can use video. So I think this is the good news about the shift in COVID into online learning. The difficulty, of course, in assessment is time. The time to do the marking, the time to spend the one-on-one with students. And I think in the sciences, this becomes really quite difficult because because of the large lectures. So I think there's a lot of positives. But the thing that blocks innovation to me is one money/time to do the assessment. But two, as professors or instructors, we haven't really been taught how to design learning environments. We've designed curriculum, but we haven't designed learning environments. So our centres for Learning and Teaching are helping us to talk about instructional design for learning, not just curriculum design. So I think that that's becoming part of our average consciousness, that that's what we need to do. So I think that's the good news about the pandemic

**Prof Judyth Sachs** [00:22:07] So Lynn, what would a learning environment look like. Can you give us perhaps a couple of examples?

**Prof Lynn Bosetti** [00:22:13] So I think when you're designing a learning environment, we can talk about rubrics for building knowledge, building, community, sharing knowledge. So it's taking the stress that part of your job as an educated person is to contribute to this community. So we'll have assessment criteria and rating that says, well, how did you contribute to that community? Designing learning environments are environments that are conducive to more authentic engagement with materials. So, you know, it's no longer 'I'm really good. I'm a good doer of school. I can memorise. I know the content', but really what we want to know is can you apply it? So we want to know what the quality of your thinking. So in designing a learning environment, we want to create opportunities for that. So we're thinking way more about using podcasts, social media, other things that keep students engaged but connected to the real world. And I think that reduces the cheating as well because it's meaningful to them. So, yeah, sorry. Go ahead.

**Prof Judyth Sachs** [00:23:18] So I was going to ask Claire, do you think that what Lynn has described as what I think is innovative and exciting would remove some of those challenges that you've been describing?

**Prof Claire Macken** [00:23:30] Yes, I do. I think, though, how do you scale this? I mean, in terms of higher education at scale, if you look at even trying to identify academic integrity, you're picking up changes in a student's individual writing style. How do you do that if you have literally hundreds hundred students in a single course? So I think there's the ideal - the massification of higher education is definitely having an impact. And exams have been a traditional way in at least Australian higher education of putting everyone into this one crazy environment to try to get to show there's been assessment of learning outcomes. But we know that a rich learning environment is the relationship between the teacher and the student, and the conversations they have with each other, students talking to other students and debating and having conversations. So I think lean around the group work and having the breakout sessions and having students challenge each other. That's the sort of environment we would like to have in higher education.

**Prof Judyth Sachs** [00:24:33] Julia.

**Prof Julia Christensen Hughes** [00:24:35] OK, I'll use an example from my prior role as founding Dean of the Lang School of Business and Economics at Guelph. So Claire we had exactly that problem. So we welcomed around eight hundred and fifty Bachelor of Commerce students every fall and wanted to give them a really engaging learning experience that would introduce them to the discipline of business, but also the unique values of Lang where we put a lot of focus on leadership, sustainability, business ethics. So what do you do? Do you teach them in cosy classrooms of four hundred? No, that's not what we wanted to do. So we introduced a third year course, an elective course, on the facilitation of learning. And some of our top student leaders would take that course. And so they would learn how to facilitate learning. They would read great books of business, synthesise, they'd learn about pedagogy. And then we cherry picked the best of them to be the seminar leaders. So we would break that 850 down into groups of 40 to 60. And so the senior students are now learning so much, the undergrad students are inspired to see who they could become in three or four years' time. And the culminating project of the course was called The Great Ethical Dilemma, where working in teams of five or six, they had to analyse an issue after they've learnt the ethical frameworks and these kinds of things, and make recommendations to how the senior leadership in the organisation in the scenario should respond. And they had to present their analysis to the actual leadership from those companies and recommend a course of action. There's no cheating that happens in that, right? And students are engaged and they're wearing their suits and making this presentation. So they have learnt teamwork. They have learnt presentation skills. They've learnt critical analysis. They've learnt synthesis. So all of these skills that are transferable while getting introduced to the discipline of business. So anyway, I'm just saying I feel your pain that's where we landed. At Yorkville, I'm so blessed that our class sizes are less than 25 so the faculty can get to know their students and do know what a student's writing style looks like. But yes, in my prior job I, I felt your pain and that's what we came up with.

**Prof Judyth Sachs** [00:27:05] So really at the core of what I'm hearing is the idea of authentic assessment and there's a comment here and can I invite - request that the people who are making comments, if you want that to be in a question, then put it in the Q&A. But this is a comment that I think is worth getting some response from the panel. "Authentic assessment for online examination of large number of students is challenging. We have 300-500 students learning in one subject at UTS. The idea of podcasts and video recording is excellent, but we also need more resourcing and budget to get casual academics to help the subject coordinator and managing the assessment." It seems to be that resources, but also expertise are the crux of sort of overcoming some of the blockages. I'd be interested to hear how some of you in your roles have overcome the blockages of reduced resources to get authentic assessment, but also to ensure that we know that students are learning and understanding the learning outcomes. Merlin.

**Prof Merlin Crossley** [00:28:14] Yay a budget question at last. Because so much of our time in higher education is talking about resource allocations. First of all, I'd just say how much I love Julia's response there, we started a thing 'students as partners'. But then you actually moved to 'students as teachers', and actually teaching something is a great way of learning something. And if you can embed that, it creates an entire community and that's what humans are like and peer-peer learning or the senior students. So I love that. And I think that's good. The budget issues are so it's an unspoken shame of Australian higher education that we have gradually expanded our use of casual staff in order to - it gives us expertise. Many are PhD students, some are people from the professions, but the casualisation of the workforce also has negative impacts on those staff. That is, it is cheaper because you don't pay salaries out of the teaching time. And we teach 30 weeks out of the fifty two weeks or, we've got the summer, so 35. That's a major way of reducing some costs. It can be a win-win, casualisation, but it also can be a win-lose. So I am concerned about it. How do we contain costs? It's exactly right. We do things like multiple choice exams which reduce marking and reduce the burdens of assessment, but are absolutely not authentic. So we're always looking for the best possible solution rather than the best solution. What's my answer? My answer is simply, I don't think we should be actually grading students in first year. That would reduce our costs. I think that all the disciplines are different. I actually think some disciplines and I notice someone I think Jann Roberts put in about maths, I think sometimes you do need to have exams. I think some exams will survive. But I look at it like a driving licence. You need to know how to drive, but you don't need an exam after every lesson. And you need to be able to take your test more than once if you mess it up the first time. So I think we do need big hurdle, Olympic Games, sorting hat assessments, but I don't think we need them in first year and that's how I would manage costs. Thanks.

**Prof Judyth Sachs** [00:30:49] Claire, what's what's your response to that?

**Prof Claire Macken** [00:30:52] Yes, I think I mean, here is the perfect time to talk about the value of teaching as a profession. So in higher education, I'm not sure if Canada is like this too, but the split between teaching, research, and service means that nearly every time teaching is not the first choice for academics in large public higher education institutions. So this debate always happens of y'know a normal academic whose workload is split in those areas. I have so many conversations about this with academics who say "I love teaching Claire, I love engaging with students, but I have to also perform in my research or I won't get promoted. I won't be valued in the institution." And that's a terrible perception and one that we're under an obligation to absolutely fight because this is so I mean, the future of students, the value to society and for the individual benefit is the purpose of teaching and learning. And that's the thing that we're missing in higher education. So when I see academics, they are often juggling this - "do I put time into something that will be of benefit to students or do I put time into research?" And a lot of the time, amazing teachers, really great people have to say 'I need to put time into something other than teaching.' And that's just a reality of the higher education system in at least Australia. So I think we need to think about the professional identity of higher education and individuals within it. And when I was a young academic, so I was a law lecturer for many years. I was the school Dean of Teaching and Learning at the time, and I used to have to talk about teaching and learning. I was in my 20s, very naive, and a very nice academic came up to me and he said, "Claire, I am a lecturer. All I am employed to do is lecture. I'm here to deliver my lecture. And everything else that you're talking about is not part of my job. The engagement, none of that is part of my job because I am a lecturer" and I think that those words have haunted me for the rest of my career because, is that really what we're here to do? Just to lecture? Because there's amazing robots that we could definitely employ that would be able to do that job. So I think this is actually fundamental to the purpose of Teaching and Learning in higher education.

**Prof Judyth Sachs** [00:33:26] Look, there's a question or a comment by Jill Cummings in the chat part and she also poses some questions at the end, so I think it's worthwhile picking up on that. "In usual thinking about assessment practises, we often see the relationship between authenticity and practicality. Time and costs are inverse. As practicality goes up, the authenticity goes down. How can we re-envision courses and curriculum to enhance authenticity and student learning? Do we need a different approach to courses?" Lynn, can I - I think that picks up on some of the points that you were making.

**Prof Lynn Bosetti** [00:34:03] Yes, thank you. I just wanted to make two comments that are related to this, this kind of practicality and authenticity. And I'm not sure that I understand what we mean by practical, because I think authentic learning is getting real world experiences to apply the knowledge, the cognitive knowledge we have, to process it and make prudent decisions about how to employ what we're learning to solve real-world problems. But what I did want to say, and this is just adding to what Claire's point that she made. And thank you, Claire, I think you were really articulate about the challenges that we face. One thing I noticed between living in Canada and living in Australia is that we don't have the term "lecturer", so we have an Assistant, Associate, and full Professor. So I think that's a nuance. But language matters, I think. And the second thing is that we have a role - many universities now have a pathway to full professors through a teaching stream. You still do research, but it's research that's applied that deals with enhancing teaching and learning. So I think that that's also one. And I think the last thing that I wanted to say is, and this relates to Merlin's comment is, you know. So much of what we do is budget-driven, right, and so we have to have economies of scale, we have to make things efficient, we have to show margins. But now that when we shift to focus on the learner and the quality of learning, the experience of learning, maybe it's time to rethink the large, efficient scale lectures. Right? Maybe we sort of have to think about lecturing. And I think the problem is, is that as the professor or lecturer, my job is to design the content. Right. And then we have sessional or tutors or people that are casualised, to do the important work of the assessment. And I mean, that can be good or bad, but there needs to be a closer alignment between that as something that's really important. And then what I was thinking about authenticity and the practical something that I think about in really innovative programs, is when a faculty or a department can come together and adopt a philosophical orientation to the learning that we want in that program. Is it going to be enquiry-based? Is it going to be to discover new knowledge? It's when the whole program is designed on kind of an approach to learning rather than the content. So the standards and what we want to achieve is, is the outcome. It provides the kind of framework but how we get there is important if we take a philosophical stand and as a group determine what that might look like so that we build from undergraduate to when they get to near the end of their assessment, some higher level, more engaging learning. So I think that there's a lot of I think there's a lot of good things that are happening right now. But what stops us, of course, is that economic imperative to make the budget work and the casualisation of staff.

**Prof Judyth Sachs** [00:37:19] Julia, do you want to make a comment, given that you're the head of the totem pole?

**Prof Julia Christensen Hughes** [00:37:25] Thanks. Actually, what I'd love to do is just pick up on a few comments and maybe bring some emphasis, some additional emphasis. So we are going through a profound disruption due to the Internet and the ubiquity of information and the ability to Google and YouTube videos. Right. If you watch your own children or children of your neighbours or family or yourself, you want to learn something - what do you do now? Right. You look it up. I'm seeing my own adult children teaching themselves all kinds of things, skills that they didn't have before. And they're learning it through YouTube or some other source, right. So, you know, the notion of the lecturer, you know, that person, that wise person standing and delivering a lecture, maybe that was appropriate before the printing press. Maybe that was appropriate before we had large scale literacy, right. But we've moved on so far from that. So if information is at everyone's fingertips, then what? And so now I'm going to pick up on what Lynn was saying. It's like then what is the purpose of higher education? What is the purpose of any particular program? And I do. And I've been sort of looking at the chat and the Q&A and I totally accept the point to that, to be competent in one's profession, right, if you've entered through higher education, there's a walk around knowledge that you have to have. And I think Merlin, maybe that was one of the points you were getting at. Right? There is a vocabulary, there's an understanding of concepts. There's just you can't look at your phone every second. Right. There's just stuff you have to know. Right. So you know, we can have creative assessments that check for that. But it's these transferable skills that allow us to assess what is the confidence that we have in this knowledge right. And and do we have the skills to apply it? Do we have the skills to communicate it to others? To work collaboratively and to bring a values orientation. So I think for each program now, and we're going through this at Yorkville, it's to clearly identify these these learning outcomes that include transferable skills and values. And then back to Lynn's point is to figure out how we design the learning environment. And I love what you said Lynn because it's so true, right. At one point, nobody knew how to teach. And then we threw these resources in on how to give an engaging lecture. But how to assess. I mean, that's the big black hole, right? So I think we do need - so to do that well, I think we need people with that expertise in Teaching and Learning centres that are working alongside the faculty so that you assessment isn't the last thing you think of, right. It's actually the first beside the learning outcomes. So how will I know when students have demonstrated this or how do I assess where students are at when they begin the program and then when they leave so so we can be assured? Right. I love, Merlin, what you were saying about that mastery based learning. Like, why wouldn't we give students multiple opportunities to demonstrate that they've achieved that skill? I mean, that's what learning looks like, right. So how do we manage this in the budget? Well, first of all, I think we get rid of I agree on the assessments that don't do anybody any good. They're just busy work for everybody. I actually think we spend an inordinate amount of resources like going through the motions, thinking we're doing something valuable. I'll just share one other point and then I'll leave, because I know, Judyth, you've got to get on to other questions. But when we did this massive study on student cheating at universities in Canada, I coined a couple of phrases and it was truly from reading thousands of students' open-ended responses. And one was "students cheat when they feel cheated". And the other is "when we create game-playing conditions, students will engage in game-playing behaviours." And the kinds of things they were talking about was the assignment that never changes, or the exam that never changes. The reality is, once you've set an exam or set an assignment, it is out there. So one really simple, costs no money approach, that I strongly advised is once you set an exam or once you've set an assignment, make it available to all of your students, put it in the library or attach it to your course syllabus, right. That this was the exam and this was the assignment I used last semester. And what you're doing now is you are levelling the playing field. You are forcing yourself to admit that those questions are already known. And you can ask yourself if that's, if now by repeating it, you will be actually helping your students learn, like rather than making it a guessing game or preferencing students who had friends or relatives in the course the semester before. So that costs virtually no money, and will have a profound effect on communicating to your students that you want to create a level playing field.

**Prof Judyth Sachs** [00:42:41] So from what you're saying and what I'm hearing and reading in other things, in fact, a behavioural and a cultural change needs to be implemented and shared in organisations. So do you want to talk to me about, you know, that idea of 'game-playing behaviours' is really quite troubling because it just sees assessment as a form of ritual, of verification, that I've ticked the boxes. So that - but the cultural thing is about integrity. So do any of you want to make a comment about changing cultures and changing behaviours to ensure that students get value for their money, but also the promise of learning is actually realised? Don't tell me, I'm going to have to do more volun-telling? Thank you.

**Prof Lynn Bosetti** [00:43:41] I think the shift in culture is what challenges leaders all over the world, in all universities right now is this cultural shift. And that's my work on incivility, where that comes in, and how difficult it is to change culture and to change behaviour. So I think that the cultural shift has to be a real commitment as a department, as a unit to take some leadership to discuss that. We are actually going to talk about designing, learning, and we're going to talk about assessment practises. So one thing that struck me when I was in Australia, I don't know to what extent this still exists in Canada, although it did before, if there is a lot of energy put into ensuring the reliability and validity of the assessment exercises. So once there - a subject has been taught, then we have to assess the kind of distribution of grades. Is there a proper distribution? So does there need to be a distribution of grades? Do X number of people have to get Ds and Cs? and I think that the other thing that is problematic is that we - that it's important, but we put so much weight on it for the wrong reasons. So let me explain. I think it's really important that students are able to evaluate courses. What I had never experienced until I moved to Australia is that if you get a low student assessment on your course, you are then subjected to engage in a subject improvement plan. I think that's a great idea, that would be fantastic. However, of me as a teacher, I'm feeling, gee, I'm a great researcher. I'm a full professor. I got lousy evaluations this time and now I feel like I'm being penalised. So instead of shifting the culture to investigate, well, let's talk about how we can improve this course or this subject. Maybe it's the content, maybe it's the assessment. So if we can change the culture where it's not such a competitive culture and that kind of grading happens to professors or the instructors or lecturers as much as it happens to the students. So my performance, my key performance indicator is that dashboard of how I'm doing in my teaching as assessed by the students. Yet that's really important, valuable information. So how can we use that in a positive way to create a culture, a collaborative sharing culture where we really want to understand how to improve learning?

**Prof Judyth Sachs** [00:46:03] Merlin, from a competitive group of eight university?

**Prof Merlin Crossley** [00:46:08] So this change in culture, you know, it's a very hard thing to do. But I agree with a lot of the things that Lynn has said. And what I think we're trying to do is get a foundation of a community of people who care about teaching. And we have education focussed staff who are not expected to do research and they're not even expected to do scholarship of teaching and research into teaching. And this community, we now have an increasing number being promoted to professor. It demonstrates to the students that we care about teaching where a lot of the students think the university only cares about research, or cares about money - we're a state university, not for profit - but they think that. This community means that great teachers are valued in a way that I think they weren't always valued before. We have student evaluations, staff were concerned about them, but we call them "my experience surveys" to indicate the students are talking about their experience, not about whether the teacher was good or bad. So I do believe that if you get communities, they can be self-supporting and you can change the culture. So it's this connectedness idea. I think it's working at UNSW. And it was really interesting, Claire's comment about the person who said "I'm just a lecturer". We call them 'education-focussed staff' because they're not just lecturers. They should be interested in new ideas, innovations, curricula, assessments, community-building, all of those different things. And we're trying to build the culture and the status. We are in a status-driven world, and I just don't think you can deny that. So we also have teaching awards and we care about the staff who provide a great experience for teachers. It's still high pressure, but I think actually it's a little bit more harmonious than it once was, hopefully. And I love seeing all the names of people I know in the chat that there's a global community now of people who are standing up for the importance of teaching and we need it now. Gone are the days where everyone just had a blackboard and a piece of chalk. That's all you need. Thank you.

**Prof Judyth Sachs** [00:48:24] Look, there's a point from Michelle Eady that I think is is worthwhile reading out and getting, I'd like Claire to start off and then I'd like because it was directed at Lynn. "Lynn, in your introduction of yourself, you spoke of the shift in our roles as academics. I see that there's a lot of talk about more empathetic, humane, personable approaches to our students and pedagogy in general. My question is, whose responsibility is it to ensure this is happening at HEIs? Should there be incentives? Notice taken of those who get caught doing good? As someone in a social sciences and who teaches teachers, it is something I work on with my students all the time. But what about some of the other disciplines that may not be people-oriented? How do we help them along with us in this journey and become agents of change?" So Claire do you want to respond to that?

**Prof Claire Macken** [00:49:15] Yes, definitely. I think, though, we're focussing on academics and their motivation and their engagement. But engagement is a two way thing. It's also about students and their engagement and their responsibility as learners. We're not here providing a service to consumers. Learning is actually a relationship between learners, teachers, learners and learners. So I think that part of it is also, in terms of changing culture and thinking about the responsibilities of academics in assessment. We also have to think of the role of students. And there's a fantastic comment in the comment section from Garima quite early today about the motivation that students have and need to bring to learning. COVID has smashed motivation. I'm not sure about you. I'm sitting at home, got my kids downstairs, the dogs, my husband, all of the sounds and all that happening around. It's very hard to be motivated in these circumstances. Unfortunately, I've sat just recently on over two hundred separate show course hearings where students are at that final stage of exclusion from the university for failing. And it's heartbreaking when you read the students who have suffered through COVID and what they're living through, you really see that, how hard is it to get motivated. So I do think that COVID has just put this whole pressure on everyone, but we're sort of focussing on that one lens through on the academic side. And I think we also have to look at the other side. And I'm just going to link this to authentic assessment, because authentic assessment is defined as providing real world experiences and having students solve problems that they're likely to come across in a future workplace setting or even a current one. And if you think about how we can motivate students who are learning curriculum design, thinking about tasks that can be practical, where they see meaning in it, where they can apply it in different environments, I think that's sort of tapping into that motivation. I'm going to say one more thing, I'm studying at the moment myself, which is the biggest professional learning I've ever done and being on the other side of the table. So I'm listening to lectures on two-times the speed, which used to horrify me as a lecturer. But I just - how do I get this information, two hours out of my day is insanely impossible. So 30 minutes to listen to someone extremely quickly is working extremely well. And I think, why am I listening to this? The answer is I'm trying to find out what they are looking for in assessment, because the materials don't explain it. They save it all up for one and a half hours into a very boring two hour lecture. And there is one bit that is not explained somewhere else that I'm trying to pull out. And then frustrating practises, but also amazing and just one with the assessment that I'm currently doing. So this extremely wonderful academic, he gets on his headset in his very messy bedroom and he just sits there and pulls up drafts that we have to submit every Sunday. And he just explains very quickly what you're doing right and what you're doing wrong. This is a big course, hundreds of students in it. I can't tell you how, from a learning perspective, listening to peer feedback in that context, it's all offline, we're not on at the same time, is helping me learn. So. In terms of great assessment practises, sometimes the really simple things can work as well. But back to your question. I think that culture is two ways and we have to look at both, academics and students and the circumstances that they're both in.

**Prof Judyth Sachs** [00:53:05] Thanks and um, we won't ask you where you're studying. Lynn do you want to respond to that question, thanks, that was directed at you in the first place.

**Prof Julia Christensen Hughes** [00:53:15] So sorry am I to jump in Judyth?

**Prof Judyth Sachs** [00:53:18] Oh you can jump in, yeah.

**Prof Julia Christensen Hughes** [00:53:20] Oh, OK. Sorry. So, Claire, thank you so much for sharing that. And I think we all felt for you trying to trying to speed-listen through that lecture. Wow. So again, like I would say, that's creating game-playing conditions, right. And you trying to desperately guess so you can direct your attention. Right. We know that assessment and grades are a powerful currency within the system of academe. And they do grab students' attention and they give them powerful cues as to how they should prioritise their time. So we've created this system. And going back to Lynn's point, you know, on a bell curve or - why did we impose a bell curve? What would be wrong with every student excelling if we'd set appropriate learning outcomes of an engaging learning environment and an appropriate assessment? You'd think we'd celebrate if everybody excelled. Right. But so why do we have bell curves? For administrative purposes of deciding who gets the scholarship and who gets to go on to grad school. So like we've created a system, right, with with these gates that say who gets to go through and who doesn't. So I think, again, to me, it comes back to doing a hard rethink about the purpose of the academy at this point in time. With all of the complexity in the world and the wicked problems. And that's why you have the United Nations and other global bodies calling for this fundamental rethink of higher education and saying, we need help making progress towards the sustainable development goals in the UN's 2030 agenda and what kind of partner is higher education going to be? So it also calls for us to break down disciplinary silos and bring people together, right, in interdisciplinary ways, and to teach the problem solving skills and problem-posing and solving. And so, you know, I just think this is such an incredible time for the academy. There is such a call for change. If we don't change assessment, nothing will change because assessment drives behaviour. And it's how are our universities assessed? How are we ranked? How are faculty assessed? How are students assessed? Right. We're all part of this system that is, excuse me, in my mind, totally out of alignment with what the world needs us to be doing right now. And so I've got another line of research where I'm really challenging rankings and how business schools in particular are ranked, and business school faculty are ranked. We need to understand the global system that we're part of and start to change the levers that are reinforcing unhelpful behaviours.

**Prof Judyth Sachs** [00:56:16] Lynn, let's given that the question was originally directed to you in the questions, do you, having listened to two responses from our panel members, do you want to add anything or contest anything or be generally challenging?

**Prof Lynn Bosetti** [00:56:34] I'm loving the conversation, loving the messages and I'm being distracted by the chats about what is a good grade, that in Canada it's not always so clear. And so that was just I think Tom that wrote that. OK, so my comments in response to to what my colleagues have said is, first of all, when I think about awards for excellent teaching, so this is about shifting the culture and I think awards are great. We have to have some way to acknowledge our great teachers. But it also creates, you want to talk about authenticity and integrity, that then some of us are really motivated to get that award, which is great. So then it becomes like gaming the system in a sense, where we make sure that students all show up and they give us good assessments and we become responsive to that. So I'm actually not such a fan of always giving awards for things. That's probably comes into what I think about assessments. So awards can be good. We definitely have to start recognising that that teaching is really important. The other thing I wanted to talk about is that students' identity is really linked to their their assessment to their grades that they get. So we call a grade point average in Canada. So my whole identity is I'm an A student, I'm an A-plus student, and they've been socialised that right from the school system, from the K-12 system. So when we disrupt that, students don't really like that too much. So we experimented with a programme where we thought, we did away with assessment in terms of grades, so you can have a high pass, pass, fail or just pass/fail. Students like that high pass because they still want that kind of extension to know that I really extend myself. So it's a high pass. So we move to pass/fail, and with that we then engage in narrative assessments. Now, I want to tell you, that took a lot of work and it was hard to sustain. But the students really had to take time. I mean, it took time for them to look at that kind of longer kind of feedback. If you get an A, you get a B, you get an 80 or 70. That's immediate feedback, but a narrative assessment, it takes me longer as an instructor to do that. And the feedback more for you. So students didn't really like that. Along with this program where we had pass fail and narrative assessments, we had a learning portfolio. And it took time for students to learn how to take, have a sense of agency and voice in how they're assessed. But it really paid off in the end when they actually presented their portfolios and we created an e-gallery of these portfolios. So there was kind of a sense of ownership and having a role in that learning. So I guess it's kind of a shift to come alongside in the learning activities. So it's not just the professor, just the person's designs are learned, but you as a student come alongside in the process. You actually come with knowledge. We want to actually show what your, where you started and how much you extended yourself and that you have a role in determining what that looks like. Now, having said that, that program lasted for about 10 years and then it shifted and it was 10 years of really convincing the university that this was a worthwhile, authentic way of assessment. But I want to say being part of that program has really influenced how I think about teaching and learning. So that was a big cultural shift, but very resource-intensive to sustain.

**Prof Judyth Sachs** [01:00:13] And you needed the stewardship and the support of people in the senior administration.

**Prof Lynn Bosetti** [01:00:19] Absolutely, and the trust - the students had to trust that this kind of process where I really don't know in the end what kind of grade point average will I have, will I get into grad school? That kind of assessment that isn't weighted by grade took a real shift in their mindset. But we're dealing with teachers, right. And we wanted to model their program, what we think they should be doing with students in school.

**Prof Judyth Sachs** [01:00:46] Look, in the last 15 minutes, there are a couple of things that are coming up and that question that a couple of people have said - the panel hasn't yet answered the 'why question' that I posed at the very introduction. So can we just focus a little bit for a moment on, you know. Justify why do we assess students? And there are particular subject roles, so if you are an employer, you have a particular answer. If you are an accrediting agency, you'll have a particular answer. If you are a parent, you'll have an answer and the student will probably have an answer as well. But putting those together, Merlin, why should we assess? Because you've also made the claim we should get rid of exams in first year.

**Prof Merlin Crossley** [01:01:38] Yeah, so I think it's great to come to this question, the first answer, so we have a degree at UNSW called Aviation Flying, which trains pilots who may well have flown you around. It's pretty clear to certify their competency, it's like the driving licence. That's one reason to assess. And then Julia mentioned awarding scholarships. For some students it's vitally important that, and I call that the sorting hat. So Harry Potter's sorting hat, is this person going to be, you know, what did they have to find out what they're - I think university is about finding out what you're good at, as well as being trained in what you're good at and what you're good at you often love. So you allow people to find their way and then you do have to sort them. Now, I think the difficulty is I was really interested by a comment by Jenny Posket where New Zealand high school students, a third of them are motivated. They're really switched on. Two thirds actually are just trying to find the shortest way to the outcome. And now with mass education, where 50 per cent of high school leavers will go to university in Sydney, we have a mixture of students. I don't think they all need to go into that Olympic Games scholarship sorting hat. I do think they have to be certified. But I think assessment's also used as a motivation for the third of students who are there because everyone else is there and because it's an important opportunity and passage to other opportunities. But actually we use assessments to motivate and I think that goes too far. And I think the sorting hat is invoked too frequently. So I'd say it's certification, it is sorting and it is motivation. But I think we overdo it on the motivation. I think we should let students decide whether they're motivated or not. And if they're not, they should find something else and be motivated in that rather than us driving them by weekly assessments. Thanks.

**Prof Judyth Sachs** [01:03:53] Okay, Claire, what's your response to the why question?

**Prof Claire Macken** [01:03:59] Yes, really good one. I mean, the purists would say that assessment is the way to measure student learning, right. That's sort of the obvious one. But if the role of the university is in part and it's not exclusively, in my view, to prepare students for a future workforce or for future professions, then assessment is a signal that they've met a particular standard. And increasingly, what's happened in higher education globally is that non-traditional providers have all exploded everywhere. So there's a whole range outside the traditional university sector that are providing credentialing assessment, saying they've met a particular standard and that is getting currency in the workforce. So I actually think that higher education itself is under threat and needs to think this through, particularly around providing up to 100% recognition of prior learning, where effectively they're just an accrediting body, they're saying we have assessed all of the learning of this particular student and we certify that they've met the standard that we've set. So I think that's a really interesting big conversation. But if you think about schools and Australian schools, this ATAR system, I have a daughter in Year 12 at the moment. This mark that sort of is a magic ticket into higher education. We've all got early entry, a whole range of initiatives to try to shift away from this, but they all drive towards this sort of entry score, which gets you into higher education. And then we've taken on that approach in higher education to give grades, to effectively get people into the workforce. That's all rubbish. It's all changed. It's a joke. Industry is not looking at everyone saying, "oh, you got this particular grade in the second year, 81, and then you went to 52. What happened?" They're looking at extra-curricular, the whole circumstance. And just linking back to assessment. How many amazing comments today, if you compiled them: portfolio assessment, where you can demonstrate all of the skills, competencies and knowledge you've acquired through learning in higher education. Thinking about creating videos, whoever said that, thank you for your sympathy in me listening to two hour lectures at 2x the speed. I agree. Imagine if I taught it instead and I played it back and said, this is what I've learnt. What a great thought, peer review has come up today. Design your own assessment. Why do we have to design all the assessments? Tell students your job is to prove that you know the learning outcomes. That's your job. You work out how you do that. I did that once. I got a cushion - I taught law - I got a cushion embroidered with a case on legislation with an accompanying essay to prove the student had meant learning outcomes. It was amazing. So I think that there's so many aspects to this the purpose of the assessment. But I don't think anyone really thinks about it. We just churn out the assessment, the exams. We've always done it this way. So we'll keep doing it. And just one more thing. I agree with Merlin. You want to know that your nurse knows which vein to stick the pin in, right? You don't her to "oh I just guess. You know, I never got to that part of it because I didn't want to do that." That's important. So assessment plays a really important function in credentialling, but within the scope of all of the things that we assess, maybe we're over-assessing. Maybe it's time for a completely new approach.

**Prof Judyth Sachs** [01:07:29] Thank you. I think we'll go to the next frame that I see in front of me, which is Julia.

**Prof Julia Christensen Hughes** [01:07:41] I love the all the points that have been made so far and of course within the literature we talk about formative and summative assessment and and then adding adding in the motivation. So I guess I think of the summative sort of as that certification, right. So that when we give a credential, it needs to represent something. Y'know, reasonable mastery of the learning outcomes that have been articulated. So I do think that's a role we have to take seriously. Yeah, I guess that the two new points maybe I would add is that I have never written anything that hasn't been phenomenally improved through peer review, and by being questioned or challenged back, it's caused me to think more deeply, to double-check my sources, to wonder how I could articulate this more clearly. So I would just say all of us in the academy benefit all the time from feedback, to how well we're we're communicating something or how well we understand it. Yeah, so that was one point I wanted to make. The other is, are we not all motivated by deadlines? Like so in our busy lives, right, to have a deadline that accompanies like something is due, like how what a flurry of activity happens and what a focussing of the mind to turn it in. So, you know, I don't know if we'd get quite so much learning happening if we didn't have feedback and if we didn't have deadlines. So I'm not advocating to throwing everything out. I think just to human nature. We need those goalposts, right, just as I was saying, the more effectively they're aligned with the learning outcomes, then the better off I think we all are.

**Prof Judyth Sachs** [01:09:30] Thank you. Lynn. Why do we assess?

**Prof Lynn Bosetti** [01:09:36] Well, I don't know that I have that much more to add, but I really like what the conversation that we're having right now. I think I want to come back to the idea with an assessment where knowledge resides. And I love the idea of peer assessment. So the idea that the lecturer or the professor has all the knowledge and is going to be the one that determines the quality - and certainly we do that. But that peer assessment and the kind of knowledge, the rich knowledge that the students bring to the class and their learning, I think is interesting to be able to utilise that in assessment practises. I think one thing that I would add about assessment and it kind of goes back to what Claire was talking about, is that when you get - so employers, society, government, taxpayers, they look to the university with confidence, that if you go to a university, we have confidence that in the students that you produce are going to be of high quality. It's been a rigorous assessment. They have the knowledge. We have confidence in the students that you graduate. So the confidence isn't, as Claire mentions - "oh I had a grade point average of 80 or I was an A student". Sometimes it's the institutional reputation. "I went to Harvard. Oh, but I was only a C student". Well, you would have been kicked out... "I was only a B student". Do we care about that? No, we care that you went to Harvard. So our reputation, our institutional reputation resides in the quality of students that we produce. So I think the move to a more holistic assessment isn't just about the knowledge and skills they have, but it's also about who they are as a person and that kind of development of that moral and ethical reasoning. I think that that's imperative. We want to produce really good citizens. And somehow we think that if you went to Harvard or Columbia or Stanford, I'm just taking America, it kind of resonates that, oh, you know, this is a very high quality student. And we think that in their learning that that's part of that process. At least that's what I think. What I think of that, if I was if I came from University of Melbourne, University of Sydney, University of Toronto, you can see University of British Columbia, our institution reputation says something, and it says something in the credentialing of our students. So assessment does matter in that way.

**Prof Judyth Sachs** [01:12:14] A number of people have been talking about peer to peer assessment. And you've brought it up then Lynn and you've alluded to it as well, Julia. So how can we ensure that peer to peer assessment is seen to be a robust way to assess, but in fact where the focus is on improvement rather than compliance?

**Prof Julia Christensen Hughes** [01:12:43] So I could jump into that, if you'd like. Yes, yes, so I'll give another example. This was an example provided by a psychology professor from Brock University, and he did receive an award Lynn, so I am a fan of some learning and teaching awards. So at 3M National Teaching Fellowship Award and Claire you might be interested in this as well, because he had a very large intro psychology course and wanted to do something other than, you know, teach sort of the facts of psychology. And so borrowing from Lee Schulman from the Carnegie Foundation. So rather than teaching psychology or teaching history right, we want to teach people to think and act like psychologists or like historians. So the sooner we engage them in the practise of the profession, then the better opportunity they'll have to learn these skills. So he set up his class as a journal, with with the task of publishing a journal. And they did that each year for real. And so the students were assigned to read a certain literature, to investigate more and to write papers. And then the class was set up like peer reviewers. And through this peer review process of reading other people's papers and giving feedback and getting papers on their own. And then the course progressed. And then finally the papers that made it through, were selected for publication. And I just thought that was such a fascinating example. Now, of course, he set up all all kinds of frameworks and, you know, to help the students who were novice learners. But he said that the pride of the students' papers who ultimately made it through, not every paper made it through, but what the students learnt in the process really just set them up so well with a host of skills that they could take with them into the 2nd-4th year or so anyway. So that would be an example of peer review brought into it...

**Prof Judyth Sachs** [01:14:54] So I'm going to have to cut you off because it's now 15 minutes after the hour. And we've now finished. And the fact that we still have two hundred and five people engaged online indicates how much people have enjoyed and got from the session. But I was asked to sum up and I'm going to rephrase something that you said Julia, I think all of you have actually made a call for change and the people participating have silently made a call for change. And if we don't change assessment, nothing will be changed. So I think that this is a timely moment for us to actually think about what's the purpose of assessment, why we do it, but also put in place to change it. So thank you to the members of the panel for your robust and really engaging contribution. And thank you to the two hundred and five people that have stayed online. And may I wish you a safe Wednesday, wherever you are. And once again, thank you to the panel. This has been wonderful.

**Prof Julia Christensen Hughes** [01:15:55] Thank you, Judyth. Thank you, everyone.

**Prof Merlin Crossley** [01:15:57] Thank you, Judyth. Thank you everyone. And thank you all the people making comments.