

## IN CONVERSATION:

## WHAT DO I NEED TO KNOW TO GET STARTED?

Key:

**MJ:** Marie Jan Buckley (Experienced OSHub Teacher, Balbriggan Community College) **AB:** Aisling Bolger (New OSHub Teacher, Balbriggan Community College)

**MJ:** Hello, everybody! My name is Marie Jan Buckley. I am a teacher of leadership, and history and geography in Balbriggan Community College, which is a town north of Dublin, and I am an experienced Open Science Hub teacher. I have been involved for the last 2 years.

AB: Hi, everyone I am Aisling Bolger I'm also a teacher in Balbriggan Community College in North County Dublin, in Ireland. I am a new teacher to Open Science Hub and my primary subjects that I teach are art and information technology or computer science. I'm going to start Marie Jan by asking a few questions, so we can all understand a bit more about Open Science Hub. So ideally, what resources would you recommend that a school would have before getting involved in Open Science Hub?

**MJ:** I suppose practically you need space first of all, and you also need IT. And suitable access, so students would have to have their own emails, their own logins, etc., just to manage that part of it. It's also good to have a large space, a cooperative learning space if at all possible, and possibly storage as well, just to kind of store all the various bits and pieces.

**AB:** Okay, and is funding provided by Open Science Hub, or would you need to have funding from the school to get involved and to provide some of those resources.

**MJ:** No funding is needed, at least I didn't have to access any, and the resources are usually what the school would be providing anyway. I think it probably wouldn't be any harm to have some additional funding if your school does allow you access to buy materials and that, but initially, no, there's no investment needed.

**AB:** Great sounds good so far! As a teacher would I need to set particular coursework? Or is there a structure and coursework provided for me that I teach, or how does it work?

- MJ: Well, there's a very structured approach given, but you have lots and lots of choice within that as to how you approach it, and the support from Open Science Hub has been great in helping navigate the choices that you have. There are obviously worksheets and workbooks available to teachers. And we have the backup of email from Open Science Hub if we need to ask any particular questions. It can be as structured or unstructured, depending on what suits you. It's a very adaptable course in my opinion.
- **AB:** Okay, and then if I was planning to incorporate Open Science Hub into a curriculum for a year group, how much time would you allow per week? Or how many classes would you give over to Open Science Hub within the curriculum?
- MJ: I think initially, you're going to find it slow going. So I probably recommend that until you're up and running, possibly 2 to 3 hours is definitely going to be needed a week. It depends. Certain times of the year can be busier than others, so an adaptable and a flexible timetable where you may be able to at certain times get an extra hour or two a week would be helpful. But I suppose it's one of the things where the more experienced you are in delivering the programme, these kinds of quirks work themselves out, and it becomes easier to administer.
- **AB:** Okay, sounds good. Is there any particular subject knowledge or background that would be beneficial for a teacher to have before taking on this project?
- MJ: I think it is a strength if you have good, solid IT knowledge. It would, in my case, have been a bit of a weakness, and it was something that I had to come up to speed on very quickly. However, I enjoy that part of it and it wasn't beyond my skills. I would only have very basic computer skills. It's not been a part of my teaching curriculum, for example, but at the same time I think a good solid confidence in IT is a huge asset in relation to that. After that, just bring your creativity and your curiosity and your willingness to work with students. And I think that works best with it as well.
- **AB:** So are there any links with further education or education after secondary school for students with Open Science Hub?
- MJ: Well, I think Open Science Hub offers opportunities for students to learn new skills, specifically skills that will stand to them in further education. I'm speaking specifically here about project work, group work, research work, presentation work. So all of these do lend to further education quite a bit, and links there though they can be as much or as little as you choose them to be. It's quite a broad spectrum so you can choose as much as you want to do, or as little as you want to do. Personally, I would recommend that you do as much as possible, because I find that the students, while they enjoy that kind of work, and obviously, if you're mentioning the fact that it's for further education, it helps them to become more involved and I suppose, to appreciate it even more.
- **AB:** It sounds from what you're saying there is it's a very flexible and adaptable course, so do you think it's easy enough to differentiate and to change and adapt to include every type of student?
- MJ: I think so. I mean when you first look at it, it seems very big and that's a good thing because it does offer lots of choice, and then it's adaptable. But you have to learn how to adapt it, and I suppose each year I've adapted it differently because I would have a different group of students in front of me with different strengths and needs. So I suppose that's really where you need to work on it: what's the strength, what's the need and what can happen?
- **AB:** Okay, sounds good. In terms of the students, does it suit a particular type of student? Or are there any kind of skills that would benefit a student to have going into this project? What I'm trying to work out is how do you keep the students motivated because I know it's a lengthy kind of project that you're doing.
- **MJ:** I think really the motivation can be difficult at times. The fact that it links to real life situations and real issues that the students are interested in does help with the motivation part of it. Sometimes some of the students find aspects of Open Science Hub tough and a bit of a stretch for them. They

may need additional support, and I suppose as the teacher then you're stepping in to support them a little or a lot, but what I'm finding is because it's in group work, very often the more able students will help less able students, and that helps keep the project going. Group work, good communication skills, good organization skills. All of these are an asset, and some students will have strengths in these areas. Some students will have needs in these areas. I suppose maybe coming back to choosing the groups carefully and making sure that there's a variety of strengths and needs within the group, as well as you finding what motivates them and having a conversation with them about why we're doing it, and what interests it'll offer them, and what needs it will meet for the students.

- **AB:** Okay, just on the group work has it given you an opportunity to see any students in a different light, because I know in group work you need students who are willing to lead groups and to show initiative? Or is it the topic, you said the motivation is very much because it's a topic they're interested in? Have you seen students who maybe with the traditional curriculum, weren't particularly engaged becoming more engaged with this project?
- MJ: I think once again it comes back to the students and seeing the purpose and the motivation again for why they're doing it. It's a different type of learning. It's not your traditional classroom-based learning. The opportunities that it offers. It's like the hook I spoke about this before the hook that gets the students interested is very very important, and it's finding as a teacher that hook to get them into it. And then that motivation, that interest, will keep them going when perhaps things get a little bit more difficult, a little more challenging. Overall, I think it's such a broad programme that students can find their strengths and needs within that. And as a teacher, you facilitate students' learning, and you facilitate the students' opportunities. They do need a little bit of guidance, but I do think overall it works quite well.
- **AB:** You say overall it's very broad and there's a lot of group work and facilitation, and it's very different to the rest of the curriculum. Do you find that very challenging or difficult to work around and work in amongst the rest of your curriculum? Or is it kind of a positive thing because I'm sure some people watching this might think that they're taking on quite a lot of work in getting involved. Have you found that it's been a lot or has it kind of added to what you're teaching?
- MJ: Second year was easier than first year of doing it and that's the way of looking at it. It is very new. It's new to you and when you take on any new piece there is a learning curve that you yourself go through, but I've certainly found that this second year was a lot easier than the first year, and that helped as well.
- **AB:** Fantastic, that helps me because I'm running my first year. And the last question I have for you is around the outcomes and the goals. So what is the end product, or what are you aiming for at the end of the project? Where are you steering students towards? What will they have at the end of it?
- MJ: I suppose obviously there's the physical product at the end, whatever the project, be it a piece of whatever they've done a display, a showcase. But for me, it's the journey rather than the end product. What have the students learned, and in reflecting and getting the students to reflect on what they've learned. They don't necessarily notice that they're learning something at the time, so you're trying to get them to look at ,oh, yeah we did that' and ,oh, yes I remember when we did that' and they're not actually seeing the journey. They tend to be more focused on what it is going to look like at the end, whereas if you encourage reflection from them, they will actually get to see the journey. And we talk about focusing on what skills they're learning in between, and what skills they've mastered, or not, over the process of the couple of months that they're doing the project.
- **AB:** Actually I have one last question for you, because you mentioned skills there, and you mentioned access to IT. Would students need to have a good handle on IT, or would they just need the basic skills to get involved? I know you mentioned that you yourself had some basic skills, but would you expect them to know a lot about IT before they got involved in the project?
- MJ: No, they only need basic skills or what I would say is it's easier if they're organized. They need a lot of help with tasks and time organization, and that will be a challenge. And I find that sometimes you do

really have to break down the day-to-day activities into almost minutiae to sort of get them through what they need. But it would be the more organized they are, the easier they'll find it. IT skills are nearly secondary, you know, and you can always have a more able student within the group. You'll always probably have one who's into it and who will be happy to showcase, we'll say, their additional skills.

AB: Okay, sounds really good – thank you!