



Linking: Nursing Knowledge and Genomics (LINKAGE)

Authors' Transcript

00:00:00 - 00:00:06

Riley: LINKAGE Project authors interview introduction.

00:00:07 - 00:00:16

Sarah: Hi everyone. I'm Doctor Sarah Dewell and I'm an assistant professor in the School of Nursing at Thompson Rivers University.

00:00:16 - 00:00:28

Trina: Hello, I'm, Doctor Trina Walker, and I am an assistant professor in the Family Nurse Practitioner, program at Creighton University in Omaha, Nebraska, in the United States.

00:00:29 - 00:04:02

Sarah: So, the project which is called LINKAGE, which stands for Linking: Nursing Knowledge and Genomics. And it is an online engagement hub, which was, first sort of imagined when I was a PhD and post-doc student or post-doc at the University of Calgary, in the Faculty of Nursing there.

And with internal funding from the University of Calgary, I developed some initial modules, and had some engagement with students and faculty as well as a couple of other components, as part of that sort of beginnings of LINKAGE. Then, it was but it was at that time, only available internally to faculty of nursing students and faculty in the learning management system. So, it was always my idea and goal, I guess, to move LINKAGE out into an open access platform.

After getting settled into, my assistant professor role a little bit, I was previously, at the University of Northern British Columbia, and I met Trina at a one of our online International Society of Nurses in Genetics World Congress. It was online because of the global pandemic that was happening. But Trina and I met nevertheless, and we discovered we have both had this common passion for genomic education for nurses. I guess I broached the subject with Trina about basically LINKAGE version 2.0. And looking at what that would look like.

So, we started updating and building out the modules again that were originally created a few years ago, and also looking at that time to set it up on an open access website. After I moved to Thompson Rivers University in, the last summer, I connected with some of the folks, I guess, in

educational design, specifically Melanie Latham, and she then connected me with the Open Press team. And it was really, really great to work with the Open Press team because, of course, as I said, open access really was our goal, and that's really been very clear that that's the mandate of the Open Press team as well.

Through this past I guess just under a year, we've been working with the Open Press team to turn the modules that we developed through PowerPoint slides into modular videos that are through the H5P platform and put them up on the website and looking at adding all the components to the website and making sure we had audio transcripts of the modules. We were connected with someone who could provide some voiceover assistance for the modules through the Open Press team. It's really been a great relationship to work back and forth to revising content, and then figuring out all kinds of interesting features we could add to the modules with games and, that kind of thing.

00:04:02 - 00:04:12

Riley: What advantages and benefits did you gain and will students gain from this project? And if you know how many students used your project?

00:04:12 - 00:07:10

Trina: So I think the major benefits that Sarah and I have gained through this is definitely being able to highlight our expertise and be able to develop the content while leaving some of the technological pieces to the Open Press.

It's been wonderful to have that huge support because again, we are nurse educators. We're not people who can deal with technology. I think from our standpoint, it was really a time saver as well as the fact that we could have a quality product, thanks to the Open Press and for their services. I think students are really going to find value and get advantage out of these linkage modules.

And it's something that they can, simply you know click and learn all the things that they want to learn. We have some interactive activities in there. Again, Open Press was able to help us with, which then really solidify some of the learning abilities throughout those modules. Additionally, we have resources in there for educators so while they are open access, we do have some that are behind it, at least a passwords so that we can vet educators as educators, and then have modules that those educators can put into their classrooms or have them come on to the LINKAGE website and view, and then behind the password protected resources would be some quiz questions and things that are related to the module or possibly some ideas for assignments.

That way, the educators have access to the answers, but the students do not. So, it's definitely a way to have an educator resource as well. Additionally we do we have marketed internationally, hence I'm in the United States. And, you know, obviously with TRU and Open Press in Canada, that is our goal, is to have an international focus.

Both Sarah and I are very heavily involved in the International Society of Nurses and Genetics, which is an international nursing genetic organization, so our main goal then, obviously with our dissemination through going to conferences. Same members would be that hopefully we would get international use from students as well as nurse educators and have a hub where people can go to learn, but also to talk amongst themselves.

We have community board there as well. That's arranged for everybody to talk about similar interests, network, and then just help each other in terms of integrating genetics and genomics, either within their nursing practice, just because they're interested in genetics, which would be great, or if they're educating in genetics as well. There's a lot of different benefits, both that Sarah and I have gotten personally, as well as our students and others, educators international, as well, as domestically.

00:07:12 - 00:07:18

Riley: How thoroughly does the project address fairness, inclusion and accessibility?

00:07:19 – 00:10:16

Sarah: I think we have been conscious of accessibility from the very beginning, and Open Press has helped a lot with that too because they are those technological experts. As I mentioned, things like having the transcript of the audio available, making sure that our audio and the words on the different slides are matching exactly.

Also, we're just in the process of building out another source of accessibility tab. We've tried to provide instructions on optimal use of the website through the different browsers that people can use, and what might work best for them. I think further, there's lots of interesting ethical aspects to lots of this conversation about genomics, be it the kind of in misinformation around race as a social construct, or it could be even data privacy with genomic information.

There's lots of interesting ethical pieces, and we plan to definitely address those and try and weave those into all of the modules that we have on the LINKAGE site. Also, always taking time to involve the people that will be using the site.

As I mentioned in the first round, was mainly based on interactions with undergraduate students, but then before launching this second version of LINKAGE, we had quite intensive conversations with faculty across Canada and the US, both some quantitative feedback and some focus groups to make sure we were hitting the target, really for those people that are going to be interested in using the site, and then providing feedbacks to them as well. Here's the site. There's another opportunity to provide feedbacks too, let us know. I guess, if there's any other changes you want to see made. I think that's also our goal moving forward as we build out, build out some additional modules with the help of Open Press.

We're very excited about that. And so another phase that we have moved into a little bit, but also help hoping to do with these new phases is consultation with nurses in the community, so nurses at in clinical practice. So I have a colleague in Alberta who has been involved in their education program for nurses who are looking to prescribe medication and receive certification to do that.

That education program is through the Alberta Health Services, and she her and I have been collaborating and they have been using our pharmacogenomics module, and so we'll plan on further consultation with her as we move, we build another pharmacogenomic module in advanced from module. So yeah.

00:10:17- 00:10:22

Riley: What might a future project scope entail.

00:10:23 - 00:11:59

Trina: Yes. Here in the near future, again, we were very excited about getting, the open pass once again. We do have seven new modules that we are planning. Two of them are to finish up our what we would consider a basic modules and really that's just kind of the main concept subjects, genomics and how things kind of interplay and work together.

And then the other five modules are going to be considered the more advanced. So that might even, mirror nicely with advanced practice roll, but doesn't have to, but it looks a little bit more building on some of those basic concepts. And how does this then inform, practice, for practicing nurses or practice nurses? And so really, we're super excited about being able to do seven modules in a year.

It's going to be pretty intense. But we have no doubt that open practice will help that, be a smooth and wonderful experience, as we have had, the previous five modules that we've created. And then, you know, there's going to be room, obviously, for a lot of collaboration in terms of getting feedback from people who are using the modules.

And so we're really hopeful that, you know, through getting some of that feedback that we would be able to then advance things even a bit further or fine tune things. As well as, you know, any of the interactive, aspects that are within the modules that help in process, help develop you know, some of those may need to be, you know, adjusted, or we can continue to revise those so that people don't get burnt out with maybe the same questions or interactive activities that are currently there. But we can see people interested in this if they continue to use it and come back for new information.

00:11:59 - 00:13:14

Sarah: I'm just going to talk a little bit about the use with students at TRU as well. I guess another piece of involving students for this next iteration and also boosting usage of the current version of LINKAGE is looking at how the modules can be integrated into the Bachelor of Science of Nursing program at TRU.

We're just in the midst of implementing a new curriculum. I've been talking with our curriculum committee, co chairs to see where there's opportunities to add some of the different modules across the BScN program. I'm really excited about that. That would be really nice purposeful look at opportunities.

Then hopefully I can help, if they want help, help faculty to, integrate some of the modules into their lessons. Had conversations with our pathology instructor already, so it's a key area where there's already a little bit of genetics content in our curriculum and can be supplemented and boosted up with the modules I think quite nicely.

00:13:15 - 00:13:20

Riley: How did you learn about TRU Open Press opportunities?

00:13:21- 00:13:59

Sarah: So I think basically through my interactions with Melanie Latham. So I had connected with her because I knew that I was hoping to have some support and also just find out what different platforms and that kind of thing were available at Thompson Rivers University.

Melanie was one of the first people I spoke with and really she identified that this might be a nice and interesting project for the Open Press to team to support. And so that's how we got connected.

00:14:00 - 00:14:07

Riley: What was your experience like using TRU Open Press and receiving support from the team?

00:14:09 - 00:16:02

Trina: Yeah. I think that our experience using the Open Press was, if I had to give it one word was fantastic. It was probably kind of superficial sounding word, but I was really impressed by the fact that they knew nothing about our project, and then they kind of hit the ground running with just very little instruction and kind of came up with some ideas.

Sarah and I as well as another team member we have on the project, we had some good ideas, but we just didn't know how to execute them. And the Open Press really gave us some good ideas, on where we could go with this, as well as some limitations that we may be up against just because of technology.

Again, all things that we wouldn't know since we're not the technological experts, so it was really nice to have the experts on our side to give us the guidance that we needed in order to make a quality product that we wanted. Additionally, and I think it's absolutely tremendous about the fact that they, how much the Open Press is so responsive.

I mean, you could send an email and literally within minutes you get something back. I don't know if that's always the case, but very responsive and from really the whole team, not even just one person because there were several people working on different aspects of our project. We were never left wondering, I wonder what the status is.

I wonder what's going on here. We had zero element of wonder because everybody kept us up to speed on, I'm working on this today. I'm doing this today. So, we knew exactly where our project was, and any of the estimated times of being done with things were met. And so there was there was no fear that we were going to be left in the dust.

Open Press was very transparent and everything that they did, which was very, heartwarming for us and definitely reduced our stress levels. It was a great experience overall.

00:16:02 - 00:16:25

Sarah: Yeah, I think one other thing to add was really the acceptance of any of our wild ideas about possible things that can happen with LINKAGE and trying to make that happen for us.

So coming up with different options to kind of make our ideas reality.

00:16:26 - 00:16:36

Riley: How do you think open educational resources will improve students' education? How would the quality of the education differ without OER?

00:16:38 - 00:18:29

Sarah: I think that the OERs can really help, we're always trying to think about that student centered focus. I think having the OERs really breaks down. I mean, I remember the huge expense of purchasing textbooks and that you faced as a student. I think if we have these really high quality open educational resources, it's so helpful for students who are already facing numerous financial challenges and not having to buy really expensive textbooks on top of that.

And I think it's a really interesting opportunity to have something purpose built that then can be shared and increase collaboration among institutions as we have here. And having something that's going to be purpose built, and I think that's one thing for us with LINKAGE, we have, there's a very few open educational resources that are targeted specifically at nurses that are wanting to learn about genomics and how genomics is applicable to nursing.

That's the kind of thing, I think with open educational resources, you can think about where there's these gaps because textbooks might be a little bit broader audience, perhaps, right? So, you can really think about filling some of those gaps and also having the broad ones as well. But I think that it just opens up lots of possibilities, for decreasing costs, but also increasing really targeted and collaborative educational resources can be produced.

00:18:30 - 00:18:36

Riley: What types of open educational resources would you like to see in the future?

00:18:37 - 00:20:10

Trina: I think to reiterate some of the future implications for OER would be the fact that we now have textbooks that are very costly. If we could have more open source or open educational resources, it would eliminate the financial burden that students already have, as well as the fact that why recreate the wheel.

It does take a village in this world to navigate everything. It takes a village to educate the future of nurses or a future of fill in the blank as educators. So, I do feel that if we can kind of band together, work and collaborate, we would be able to help each other and avoid always starting from the ground and working our way up, or we might just get a bit of a step up if we have access to open educational resources.

I think that again, it allows educators to have that ability to then emphasize maybe certain things that their textbook doesn't emphasize because many times a textbook is going to be very general, and then you can't focus more on those targeted things rather than everybody kind of learning in silos and maybe with a different textbooks.

They can get an overall same general sense. If those were all open access, we would know that there'd be consistency across the board as well in terms of what generalities they're learning. Then if they would happen to go into advanced degrees or advanced anything or build upon something that's already advanced, everybody would be at a level playing field as well. So, it would bring that sense of equality and education as well.

00:20:10 - 00:21:29

Sarah: Just building on what Trina was saying about that equity piece because I think as we mentioned, the big focus, ours is on international organizations that are looking at genomic

education for nurses and what that looks like in practice as well as policy and all those pieces, really around the world.

I think open educational resources can support that international education, really. Also, because they are more readily adaptable to the enormous changes we're seeing in fields that are advancing like genomics that are advancing at this rapid pace, you can have that capability of keeping up to date.

Whereas that's a little bit harder with the traditional textbook approach. I think for me, that's another advantage of that OER piece is that having that real ability to have an international resource that everyone can contribute to and can all learn from each other that way. And also have that as Trina said, that equity in that same level across different educational programs.

00:21:31 - 00:21:36

Riley: Thank you for the interview, Sarah and Trina.