Interview with Manos Sfakianakis, on June 16, 2017, in Leith Community Treatment Centre, Edinburgh UK. Manos is the leader of the Pulmonary Rehabilitation Team. The interview was contacted from the Team of the University of Edinburgh. The main supervisor of the Project is  [Jacques Fleuriot](https://dpmt.inf.ed.ac.uk/msc/person/1339), the second supervisors are [Petros Papapanagiotou](https://dpmt.inf.ed.ac.uk/msc/person/1933) and [Cristina Alexandru](https://dpmt.inf.ed.ac.uk/msc/person/2097) and students are Eirini Papakosta and Ma Lie.

# Q.1. How students approach the center and get the list of the material that they need to study.

***Eirini***

What is the procedure for the students in order to get their placement at the Pulmonary Rehabilitation center?

***Manos***

The normal procedure is that the University contacts the clinical educators throughout the year and asks if we would be interested to get a placement here for the students. So when they have their slots the University will allocate randomly the students to the corresponding placement, so we don’t know the students before they actually come here, to be more precise we don’t know the students before they contact us. So many services have a specific number of placements that they need to offer to students and the same applies to our service also. We have 7 students at the moment.

***Jacque***

So the selection of the students is random and you have no saying as to who is coming here? So the students are from around here?

***Manos***

Yeah actually we don’t get students from all Universities. At the moment the students that we get are from Queen Margaret’s University in Edinburgh because there is no other University in Edinburgh with Physiotherapy Department. I have also spoken with the Robert Gordon University and the Glasgow Caledonian University and they have expressed lots of interest to the project on how initiative and student center it is. So potential it could be transferred nationwide and they could be giving some feedback in term of the material, the outcome as well and the learning approach.

***Jacque***

Are these the people that we are waiting the approval from for the material?

***Manos***

Yeah I have sent the material to the members of the team here but also to the Universities because it would be biased for to just send the material to our team only because it is for students.

***Eirini***

What happens after the students get allocated to the different services? What is the procedure that is been followed?

***Manos***

So when the students learn for their placement they search into their Universities website for a place called hub which contains all the information for all the different services and they can find the list of books there. So generally they have access to the list before they contact us but in some cases they also ask for additional material that might help them with their placement. The students are required to contact us 2-4 weeks prior to their placement.

***Jacque***

So they would have 2-4 weeks to read the material and contact u?

***Manos***

No actually they will have more time to study the material but 2-4 weeks to make us aware that they are coming. So that is for them to contact us and ask more information about the timetable of their placement, the schedule. So depending on the year the students are, 2nd year students might actually found a bit later whereas the 3rd year and 4th year students have access to the allocated placement early in the year so they will know that way ahead.

# Q.2. Do students have prior knowledge over the material?

***Eirini***

Do the students have some basic knowledge before they studied the material for their placement from their degree or they learn everything from the list of books right before they come for the placement?

***Manos***

So there are some modules relevant to the pulmonary Rehab respiratory care and one of this is the cardiorespiratory module that is delivered in the second year of the student.

***Cristina***

So when do the students start their placements? Which year?

***Manos***

There start their placement in their first year of study and they have 2 weeks of placement so they are not allowed any hand on works, they observe how things are working and getting some knowledge about the service. There is a 6-week placement at the end of the second year and then another 6 week at the beginning and at the end of the 3rd year. In the 4th year the students have placement in November for 6 weeks and then they need and then they get placements according to their interest and it is the only time that they don’t get allocated to their placements by the University and they are responsible to find by their own.

***Cristina***

So you get students from any year?

***Manos***

Yeah. And also we get students that are doing their master’s degree and they might have finish an undergraduate degree in sports and they do a preregistration and they have 2year fast track rather than four years of studies but in a masters level so they can be qualified physiotherapist. So we tend to have a mixture of students and again they are allocated by the University so we can’t really choose the students.

***Eirini***

Have you notice any difference between the motivations that the students show in terms of studying the material according to their year of study. For example students in their second year of study they might be not that motivated to read the material that have covered in way in the beginning of the year.

***Manos***

Obviously is not only the different years but also the individuals themselves. There is many people that are very confident and there is many students that even in there 4th year there are not where they need to be so it just varies. Obviously you would expect more people to become more confident and have more holistic approach as they grow in University years but that does not always true. Some that comes in his final year and have already did another placement in the center in his previous year will be more confident to the material.

# Q.3. Failure rate of students?

***Eirini***

What is approximately the rate of the students that fail their placement each year at the Pulmonary Rehabilitation center?

***Manos***

The overall rate is quite low at the moment and that is really good. Four year of a class you might have a handful of students. So you wouldn’t expect for that 5-6 students fail in the period of 4 years.

***Jacque***

How many students do they take the course in general each year?

***Manos***

It depends on the year and the University, We had small classes of 20 people but historically we had classes of approximately 40-60 students. Again it varies because they need to balance the students of the bachelor and master program and is all about equal opportunity.

***Eirini***

I am asking this question in order to understand how important it would be the development of the platform and how useful it would be for the students. So the rate is particularly low so what is your opinion?

***Manos***

The think is that by studying and working improves also performance and not just the pass or fail element so we are thinking how to improve that and we had people that have fail their placement before and it is difficult to actually blame the material but the general idea is that we want to prepare them better. For us is more about how our center provides the best for them and once that is been achieved we can look for different things that might cause poor performance.

***Petros***

The rate of failure is approximate 5% so if you can even help those people that is good enough right?

***Manos***

Yes of course.

# Q.4. Do educators or clinicians asses the students?

***Jacque***

So when they are coming for placement here does anybody coming from the University to see how they are doing.

***Manos***

So it is often a good practice for the educators to communicate with the clinicians but if there is no reason for concern that they wouldn’t normally have. The students are required to make contact with their supervisor at the University in case that something it isn’t working well or just to say that things are ok.

***Jacque***

So are the students assessed?

***Manos***

The students are marked. They have a midway and final assessment. The midway assessment is if they are meeting their basic demands because there are some basic things that they need to be doing and go through their cml and give them some tips on how they can improve some skills which is a good process for the students to think where they might not doing vary great.

***Jacque***

And who does that?

***Manos***

This would be with the clinicians. The assessments are basic assessments given by the University and it is for the students to see how they perform from day one until there last day of their placement and it is not on how much they know when they arrive for the placement.

# Q.5. Expand material in the Future?

***Eirini***

Will the material given to us that is conducted in 4 units, expand in more units in the future?

***Manos***

Well first of all let me apologize for the drama that you had to go through until you read the material because it was only a draft but I have the final one if you want me to share it with you.

So when you say expand to you mean until the end of the project or in some years?

***Eirini***

Yeah both.

***Manos***

Ok so I wouldn’t expect the material to change radically throughout the period of you designing it. We might have some changes or small insertions but it wouldn’t be something to be… So we are talking more about an indication of tips or case studies but it wouldn’t be something that would require by my own knowledge, would require changes in what you are doing. And for the future, in order to answer that part of the question as well, if we are thinking of expanding that and making it available nationwide we probably need to see if the content is exactly what other services are doing, if not we can moderate it or basically enrich it. So we can make sure that it can be used from all Universities.

***Cristina***

So maybe you will need to change some units or add more units to make it flexible in this respect?

***Manos***

I wouldn’t expect it to be 2 or three units more it might be one more unit but what I would actually think that is more reasonable is to add more information in the already existing Units or maybe alter them a little bit.

# Q.6. Flow and Time of the material?

***Eirini***

Do we expect the students to follow a strict flow through the Units? Visit for example Unit 1 first then move on to Unit 2 and goes on?

***Manos***

I don’t think there is any reason why we should limit it. It think clearly you need to start from the first Unit because it is the baseline of knowledge so looking at anatomy and also is also looking in terms that you might come across later on and that is I think what we need to promote and suggest the students to do but if a student for example is sitting here while on their placement and they need to refresh some of that knowledge or get back to the material, I think it would be good to have access to the material without having to go through the whole platform.

***Eirini***

And we also mentioned in the previous interview that we might consider something like a progression bar for the students. Would this be in terms of the point given through the Quizzes or just a progression bar that marks where the students are at the moment?

***Manos***

I would probably think that is better to have the completion in relation to how far at the modules you are so not actually the module but the units, how far done you are. So one of the think that I actually discussed with the persons that works at the National Education for Scotland is that it would be wise to keep the content to four hours and…

***Jacque***

Not the overall content right?

***Manos***

Well not the external resources that we can suggest but the essential material that is need to be read throughout the units that would be 4 hours.

***Jacque***

So do you think that you have 4 hours of material right know?

***Manos***

Yes. Well you also need to tell me your opinion because my idea might be different.

***Jacque***

No no, I am trusting this. Let’s say that 4 hours of material is equally distributed across the Units, or not or do you have time for the units?

***Manos***

Well I think they are not equal you are right, I think the last Unit has a bit less information you are a 100% right on that. This is one of the units that I am thinking some of the amendment to entering to but I don’t think that they need to be equal because they don’t have the same amount of information but this is something really good to think in terms of the design of the platform

***Jacque***

Because then it is good to have a measure of how long the units take , cause you might need progressions in terms of the time that you spent on something or the time that you have left on something but that becomes a way of measuring how far down you have come and the progression that you ’ve made. So do you think that you would be able to give us an idea of how long the module would take eventually?

***Manos***

Actually each Unit in the module mentions that in the introduction that it takes 45 minutes to an hour and also the learning outcome that you need to be achieving by the end of the unit. All the learning outcomes are obviously assessed through the quizzes or the questions. But this can always change, I am not sure how it can change in the back end but in the front end it might change instead of half an hour to 45 minutes or something

# Q.7. Quizzes?

***Eirini***

I have noticed that some of the Quizzes are in the form of exercises and they are embedded in the Units for example in the first Unit we have the Bristol COPD Knowledge Questionnaire as the final test but refers more to the 3rd subcategory of the first Unit. So will each Unit get a final Quiz?

***Manos***

So yes the Bristol COPD Knowledge Questionnaire is more of an Appendix that I have toward the end. I don’t see the reason why we need to have something specific at the end of every Unit although we don’t have that many units, I think it is nice going through the units to have different ways of assessment so it wouldn’t get boring or just expect something to happen. And then again if we asses all of them together like in the 2nd Unit were there is more kind of theory for the Respiratory Conditions it might be too much to keep them all towards the end so I think looking up to the outcomes if you want to achieve specific thinks like the management of the condition I think it would be better … But if you think that this is something that the structure of it would be a bit of a problem to make then we can always reconsider that.

***Eirini***

We have discussed in the previous interview that we might forbid the access of the student to the next unit if it doesn’t complete successfully the final quiz of each Unit but we can change it for the quizzes in the subcategories or we can construct from the already existing quizzes in each unit a final quizzes.

***Manos***

Yeah that is actually a good point we have actually discussed that. I can’t really see why we shouldn’t allow them to go to the next unit if it is something that they can access either way. If it had a strict flow then that is fair enough but it doesn’t make sense if then the student can access the Units from outside and then we promote learning from everyone so it is better if it is flexible for the students to choose what they want to do kind of.

***Cristina***

So if they finish do you actually want to provide a reward or a certificate?

***Manos***

Yeah I think you can do that, defiantly , you can always have the option of bringing a certificate but we just need to make clear to them that the certificate is not for us is more for them and I think this is something that we were discussing if we will make it for other professions as well . If you are a physiotherapist or a nurse working in a different service and we realize that your knowledge in this certain area is not that great then what is an online module that can help you with this?

***Cristina***

So the certificate will be given at the end of each unit?

***Manos***

Yeah yeah, I think at this point giving a certificate won’t change anything so we can always have the option of that at the end of each single unit or maybe a certificate or a reward at the end of all modules

***Eirini***

We also said the idea of putting a timer with enough time for the student to read the module and then appear the Quiz. Do you think that this is a good idea?

***Manos***

Ok but then what would happened if he transfers to other modules? Can he do that?

***Eirini***

Well I guess he can move to other modules but the quiz won’t appear until he finished the required time the subcategory that belongs and we can set reminders in order to tell him where he is at, at each module.

Does that make sense?

***Manos***

Yeah the think is that if we actually do that it takes us back to what we were saying about assessing them and the modules are not for assessing the students is more of offering that knowledge and then the student can actually confirm if he achieved something or not.

***Cristina***

So they should have the possibility of jumping around the different subcategories also inside the unit freely?

***Manos***

Well yeah that is what I was thinking about, but we can always change that too to feed your purposes. And then what I generally see and we have discussed is that if the student does not achieve some point for the quiz then we will present him with another and that was an idea for our project but then again the content increases and then you can’t really say if you achieved the learning outcomes that you have said at the beginning of the module. If that makes sense because every quiz offers the confirmation that the learning objectives have been achieved.

***Jacque***

You could have alterative questions that would be the same. So if you do another quiz because you haven’t passed that one fully would it be a new one or it would have the same questions?

***Manos***

Yeah you can do that, you can retype the Questions to either make them more easy or more clear and again the question is how many of those questions will you give them 2, 3, 5…

***Jacque***

It depends on how many questions you have lying around because they will not need to be the same but they need to respond to the same objectives, so how difficult would be to do that?

***Manos***

It is not that difficult to do. The other think that we can do is do reopen the same quiz if they don’t answer fully.

***Jacque***

But then it would be like they potential randomly keep trying. Hopefully is not that bad.

***Cristina***

Another think that we could do is to change the order of the questions and the answers so they cannot memorize the questions?

***Manos***

Well yeah.

So in terms of the design what works better for you?

***Eirini***

Well I guess we don’t know yet. I am in the progress of finding out actually.

***Cristina***

Will you be into the idea of providing different types of questions if that is proven from the literature that works?

***Manos***

Yeah sure.

***Eirini***

The other think that I wanted to ask is if it is possible to provide some stories or scenarios so that the students can infer the knowledge that they grasp from the material to the real world?

***Manos***

By stories. Do you mean use cases?

***Eirini***

Yeah

***Manos***

There is already one but I am planning to create another one and there is also an exercise where you can match the condition with images from different inhalers which is basically drag and match. The idea is that you can offer that knowledge and they can come later here and apply that knowledge to clinical practice and all this.

So would you like a bit more of that? Is that what you are saying?

***Eirini***

Yeah I think that it would be really helpful for the students to understand how it is done in real life.

***Manos***

So what do you have in mind?

***Eirini***

My question now is in terms of questions and answers. I think it would be easier if we had multiple choice questions rather than whole answers because then the students can.

***Manos***

Ok the way that I thought about it is that the students would have an empty box and they would write their answers and then they could have checked the outcome.

So would you prefer if I wrote multiple choice about the outcome?

***Eirini***

Ideally, the students would have written their answers in the white box and then they would have send you the answers to correct them but we said that the students will not communicate with the clinicians so that is why I have suggested the multiple choice questions.

***Cristina***

Because otherwise it would be up to the student to correct their questions while otherwise the system can say this correct this is wrong.

***Eirini***

And also I think it would be better for the student to evaluate his knowledge because I don’t think that he would be that motivated to answer a questions by writing it in a box if he is also going to evaluate it himself rather than reading the answers and checking a box and finding the answer.

***Manos***

Ok fair enough I thing that probably we could have a mixture of those things. The problem with true or false or multiple choice questions is that they don’t trigger the complex learning, whereas when you thing about something with no indications you start producing it and that is why everybody hates it and I hate it as well. But it is actually true that when you are asked something you contact all the information from your brain in order to compose something. But we can do that I could try and create the other one or two case studies in that form.

***Jacque***

We can actually do both because one thing that we care is to keep the student motivated and interested in learning. But multiple choice can be good because you can easily do quantitive analysis in order to understand how the student answers and you can compare different outputs and you can find if a question is really ambiguous because if all the students have answered wrong. You can find outliers and check if there was something wrong with the question itself. It is quite interesting because you can do a lot of analysis on this.

***Eirini***

Also I guess it is another measure of how the material is formed because if the students answer incorrect in questions from the same area then that indicates that the students at that particular area have some difficulties.

***Jacque***

Yell yeah of course but it does take time and effort to create good multiple choice questions.

***Manos***

Ok so my question would be. If they answer wrong do would you give them an indicator that they did wrong and present the correct answer because then we really need to consider the workload.

***Eirini***

I was thinking to inform them for the question that they answered wrong and maybe redirect them with their own will to the place where the material responding to that answer is so they can re-read the material.

***Jacque***

What is good about this is that it makes it quite maintainable and you can explain wrong answers which is always good.

***Petros***

But this depends also on how much you would expect the student to interact with the system. Jessie found some resources that describe different ways of appearing the answers after each questions or after they answer all of them. You can get information or explanation of what you did wrong or maybe you can give hints maybe you should consider this or this or that.

***Eirini***

I guess Eirini needs to look into the educational literature and get some idea on what works and get the best options that Jessie could attach.

***Manos***

But still we need to consider about the time of the content. I am not sure how much time it took you to go around the material but we need to consider the time limit that the National Education for Scotland told me to consider.

***Jacque***

Sure yeah, One thing that is good when you have options is that you don’t need to present the same to everyone but then again you need to offer the same learning outcome. So what we actually want is to be able to provide you with options. Ideas that you might prefer.

***Manos***

And I think that this is the best thing to do because then you can find the best option that suits a different question. Because if the outcome is coherent it doesn’t really matter how you would do that.

***Jacque***

Yeah so probably we can have different options. Maybe you want like one but we can actually explore it a bit and see because it might not be what you like but in terms of their thesis is good.

***Manos***

Yeah definitely experiment and do that.

# Q.8. More specific Questions for the material?

***Eirini***

In Unit 1 page 3 the image is an animation right?

***Manos***

Yeah that was what I was thinking about actually, there is one that I can show you online. Basically you go over with the mouse and a part flashes out and then you get the information for that part.

So do you think that this would be something easy to do?

***Eirini***

Yeah.

***Jacque***

Well do you expect part of the picture to be highlighted? Because it depends on the format of the picture. Is that jpeg?

***Manos***

Well I am not sure but you can find it in the internet.

***Jacque***

Ideally what you want is layers of pictures because in terms of the design... But I think that is going to be very complicated. But it should be ok but it does take more time.

***Manos***

So this is what I was thinking. (Shows pictures)Hover in the different parts and get the information.

***Jacque***

Is this html, is this flash I cannot tell from here.

***Petros***

Is that public?

***Manos***

No it is not public, it is from -----.com which I have actually no idea if we will be able to get it. I actually have a more abstract picture over there.

***Jacque***

That is interesting that looks like is being done with html right? I cannot tell from here.

***Manos***

That is what I had in mind but we could have the different parts highlighted instead of hovering over.

***Jacque***

So this is not public you said?

***Manos***

I am not a 100% sure.

***Jacque***

That would help bud anyway we can get some idea.

***Eirini***

In the 1st Unit in page 5 there is the description (CHOOSE ONE OF THE BELOW INVESTIGATIONS TO LEARN MORE ABOUT IT BOXES). Those are going to be boxes with the different categories and then the student will choose one to see the information right?

***Manos***

Yeah that is what I was thinking and I think something really similar with tags later on with the outcome measures where you have the differend outcome measures and what they do the ones that are more patient reported and the others that are more projective so you can have the two categories. So probably when you finish one you would have to go back and start the other one.

Does that make sense?

***Eirini***

Yeah yeah sure.

And in page 11 of Unit 1 we have some references we will put at the end of the Unit right?

***Manos***

Yeah that is what I had in mind that some extra resources can be found at the end of each module or as a tab on its own, Resources.

53 minute of the recording