Designing learner-centric e-learning in STEM disciplines Prof. Sahana Murthy Dr. Anura Kenkre Prof. Diebold Nixdorf Interdisciplinary Programme in Educational Technology Indian Institute of Technology, Bombay

Lecture – 30 Integrating LC elements in E-content

Since, you are coming from industry with so much of experience, from an industry perspective how critical do you think is learner centricity in the design of e-learning?

Yeah. So, I will come to that basically in the industry there are four areas under which products are created, so it depends, is what is my answer.

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Learner Centricity - Depends!

- Business Centric Learning If your business had a goal to increase their sales by 12%, training such as "Closing the Deal" would be commissioned so that each employee's ability to reach the sales goal is enhanced.
- Learner Centric The learner/staff member has a target of increasing
 their sales by 12%. A training needs analysis takes place directly with the
 workforce and indicates that they are proficient on "closing the deal," but
 they need training based on the needs assessment so that they can better
 match products and build confidence/trust with the client.



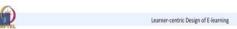
Basically, it could be business centric that is for their business purpose. I have given you examples; that if your business had a goal to increase your sales by 12 percent and you just want to close the day. You are not interested in training anybody, so that means, a business perspective you do not want to train anyone. Similarly, but if you come to learner centricity, that is now you are interested in training your learners, that is it they have to achieve a certain target.

Let us go with the same examples that they have to increase their targets by 12 percent. How do they do this? So, you have to train them, that is when learner centricity comes in.

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Learner Centricity - Depends!

- Content Centric Learning A business has a target of a 12% sales increase. Rather than pinpointing the need, the business releases a course that covers product knowledge, prospecting, the approach, the needs assessment, the presentation, closing the deal, and following up.
- Employee Centric Learning The business has a target of a 12% sales increase. One of the employees is already meeting that target and has been giving lectures in the sales community on that very subject (making him the SME). He takes a recording of the session and posts it internally on their social network tool (in this case, Yammer).



Another two examples is when they content centric, that is they have no understanding of the content itself. Then you do not train them for further skills, first get an understanding of the content itself.

Or lastly employee centric that is their own skills maybe soft skills need to be enhanced. They cannot even have a conversation with the client. That is a very big roadblock. Because if you cannot speak to a subject matter expert you cannot get your queries clarified, and if you do not have a very good understanding of what is to be created; how will you create. Because SMEs are very very busy.

You have to block their time and then be ready with your bunch of questions. They are not going to come again and again. They are very high level people who have extremely busy. So, make sure that all your queries are there in place when you speak to them. So, that is why you should be sure that for what goal are you making this. If you are making it for your learners only that is when learner centricity comes in.

That is where learner centricity actually becomes critical.

Yes.

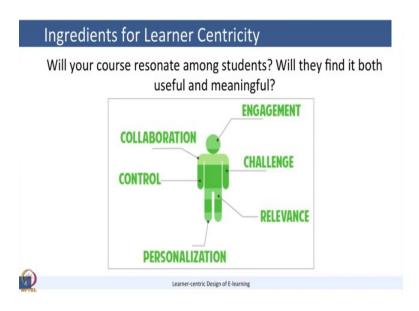
Even in industry, right.

Yes.

Ok. So, yeah you have discussed about learner centricity and then quantity centricity, and employees centricity. At what are the different aspects of learner centricity that you need to consider when you are design in your quantity learning?

Yeah. So, when now your focus is on your learners, and who are only interested in maybe training them for a certain product or for a certain skill, so it depends upon what is more useful and meaningful to them. It is not for your business anymore, it is not for your the soft skills development. It is not for generating more revenue. It is for your learner. So, you should make sure that they have the control.

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Give them certain challenges because otherwise how will they learn if they are going to just sit back and watch, they will never learn anything. So, give them certain challenges. Let them be activities. Allow them to work with each other. Allow collaboration. So, all of this you can do we have blended learning and within web based training also you have the demands, within that

also sometimes you can have Skype based sessions and your all your learners can speak to each other. And there also like I said you can get me fight, if nothing else. Have leader boards. When you see your name going up on that board, it is lot of fun.

Fun, yes.

Because you know you see yourself improving that gives you a very big motivation to in the go and you know look at it. That is how you remain engaged, because if you are going to see yourself improving you would only want to learn more, right; so, the keep it relevant to them. Now, within all of this e-learning, if you start giving absorbed examples again you lost your learner there. So, make sure it is relevant to your audience.

If they have come for on boarding talk only about on boarding, do not go and start explaining details which are there later on, they are going to learn it anyways then. So, when they are just coming in you teach them only what is required for beginners, that is how you make sure that you kept your learner in your focus and you are creating your product, all your training material whatever you refer to that.

Right.

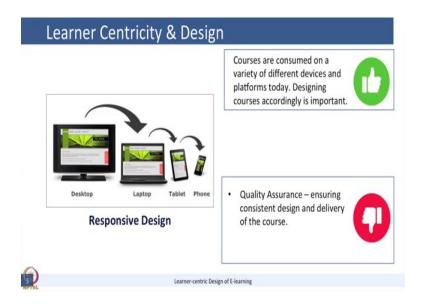
So, probably one more question. Based on your experience what are the common mistakes that people do especially when there is an in the content considering the arena centricity, I mean that you have spoken about which elements are now mostly missing and which ones have been incorporated so far yet, as far as experience is concerned?

So now, I will tell you certain examples where you have kept learner centricity in mind that is your learner is your focus now, and then you have to now design a product. So, let me give you certain examples. First I will speak about responsive design. So, your learners basically, I am not going to sit in the office all the time they will be stretching, right, they will be there in the office to do their work as well as they will be there to, they want to go home also.

So, at that time now if you have made a product which you can look at only on the machine, only on your computer they cannot access it on their mobile or maybe a tablet or something else then how will they look at it, they have to again based there time in office. And all of your time which

is very critical to your projects gets engaged in to going and you know improving oneself. Instead, of you create responsive design. Now, what do I mean by responsive design?

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Yeah, yeah.

It means that is your entire screen adjust according to your what you say device.

Device, device.

So, suppose I create some module here, but I create it in adobe rise. Adobe rise is a software, it is a software product in which the entire template is pre-defined and in that whatever you create, if I open the same thing on my cell phone it will adjust. Your graphics will get adjusted, your text will get adjusted, you need not worry about it. Another thing is that if you open up your tablet now or just go and open your entire computer, it will look the same. So, it gets you know expanded and compressed according to whatever you are opening, it responds that is where it is called responsive design.

But another thing you need to make sure is that the quality is all this taken care of because you should, it should not be that you are scrolling for ages. You know you have text on screen, but now am I having it on my phone. And I am just going to keep scrolling I just shut it and keep it.

Yeah.

You know do not do it. It is not funny then. And also version control; when you are making these, because sometimes your smartphones may change. Now, a laptops, you remember the only your laptops which were those big ones, and now you have smart screens you have even like smaller screens than this.

Yeah.

Make sure that was not control does not have to give you a problem. Because if sometimes while creating your files, version issues happened that is your earlier versions have been improvised, and that is why you have a latest version.

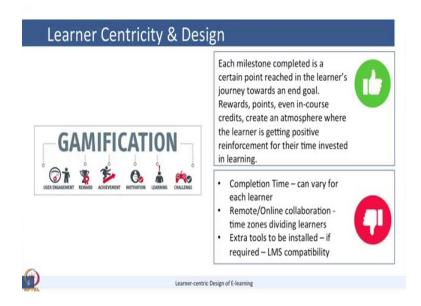
Ok.

Now, if you created in your earlier version and you are going to you know publish it in your latest version it may not happen. And you will get glitches, you will get (Refer Time: 06:59). So, make sure that version control is taken care of. And also file sharing, make sure that it is all taken care of on their phones or their tablet us anywhere you should be able to download it or just read it. Now, you have to make sure how you do this. So, again now here when you see on the screen when I show you a thumbs up, it means that what am I referring to, why is it good. And, when I show you a thumbs down it means what all challenges can you possibly face. There can be more. I am just giving you a few you know ideas in which you should be careful about.

Yeah.

So, let me just brief you about another example. That is, now again I said we have to keep learners in mind. So, how do you keep them engaged? I just spoke about gamification.

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You make sure that you reward them.

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Give them you know their put, put their names up as leaders or you just give them achievement. You know give them medals or do something else. You have to be creative there. So, make sure that at each milestone they have some motivation to proceed.

Gamify the entire thing. Make sure that you do that because your learners will always remain engaged. They would want to do this. And finally, then you know so many games we have seen on our phones which are challenged based people have stuck to it forever trying to complete that challenge. So, you know when you give that that whether you can do it or not, people will say of course I can do it.

They will attempt it.

Yeah.

At least attempt it, right.

Yeah.

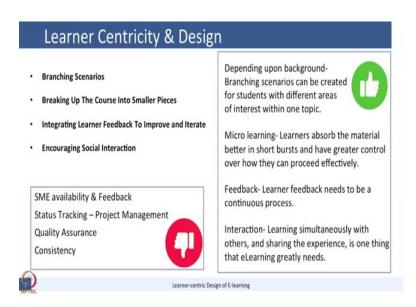
So, but make sure that the challenge you are facing is completion time. They will forever sit doing one thing, they will never finished the entire thing [FL].

You know you will just sit and do that much. So, try and avoid that see that the completion time is not too much or if they are going to go remote or they are going to go to some different places make sure that it reaches still there, now how a bandwidth issues are there that you have to take care from your technology expert. And, make sure that your remote users are also able to you know get access to your products, and sure that that is there. And also make sure that no extra tools they need to install in their phones because not everybody has that much of capacity.

Capacity.

So, make sure that that does not happen. These are possible challenges. And also in learner centricity I can say that to make it more engaging and more interesting for your learners make sure that there are branching scenarios. Do not tell everything on one page. Like branch it out.

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Like if I have decided one thing that yeah I can face the possible problem here, then take me to smaller problems there. Do not just till all possible problems in one place. So, take branching out scenario. Break it up in to small-small pieces. People find that much more relatable and much more faster to learn when you have small-small piece, and you can complete it.

Right.

That much is so much better. And also give them feedback. If they are continuously not being able to do anything, then tell them why; where are you going wrong. So, you know sometimes you may have seen human characters, like not cartoonish character. Cartoon was work [FL], it is not that they do not. But then how much seriously everybody will take it its questionable. So, but if you have a human character which will simply come up and tell you let me help you.

Let us do this together. So, when that happens people again get a thumbs up to come and try once more or simply socially just put it into social interaction. When they have their peers along with them trying to attempt the same thing; they will also have a motivation to attempt it. Nobody is doing it, why should I do it; you know that kind of school of thought comes in.

Yeah.

So, if I socially done everybody will try. But it depends again upon their background how much of workload do they have. If they have tremendous workload and you are going to tell them to go into social media and do it, again questionable.

It becomes difficult.

And also it makes sure that they have given feedback and interactivity as much as possible.

Right.

They are not just sitting back and listening because they do not.

Right.

And during all of this the challenge which you can face is your SME, because you are doing this throughout you are creating branching scenarios. You are creating so many new-new things, for that you need to make sure that the technical content is accurate. There is not a single mistake in it. Because then your learners will learn something which is incorrect, and which is the biggest blunder you will make. Other than all design elements that was the biggest blunder you will make that telling them wrong things.

So, make sure that your SME is available. And ensure that the SMEs available way before you start releasing and publishing and designing these things. So, SME availability is one thing. And also how will you track this? They are going ahead and going into scenarios and going and trying and different things, but you have to track their success or failure or where are they right now, current status. So, make sure you have tracking that can be done through project management. Right now there are multiple tools which are learning to do this. So, but that goes into project management.

A designer need not worry so much about it, but that is a possible challenge which you can face. And like I said quality assurance is always there. You have to make sure quality is taken care of. And lastly consistency, because everywhere if you are going to have different things and you are going to start putting different colors and different graphics which have no meaning with each other; it just gives a very poor impression.

Yeah.

Yeah. So, yeah you have few examples.

Thank you.

My pleasure.

Thank you.