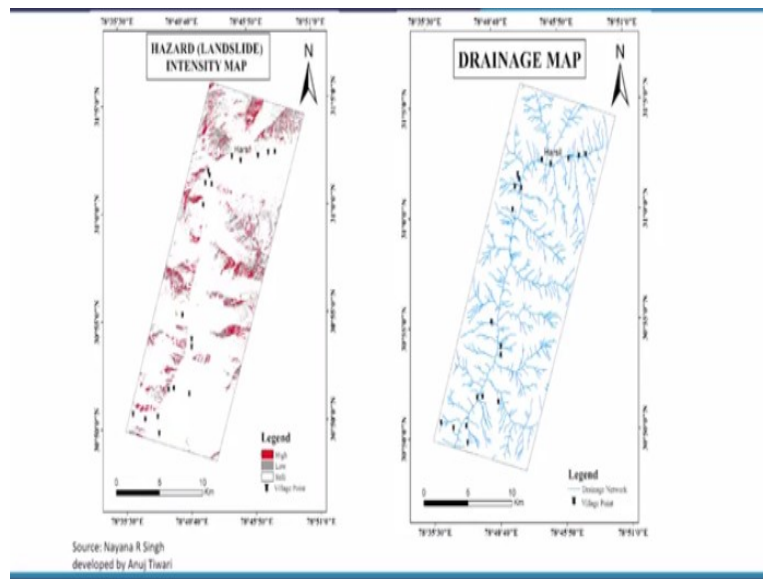


And this is where how the tools; the digital tools are also conditioning your thinking and your understanding process and also your design ability as well.

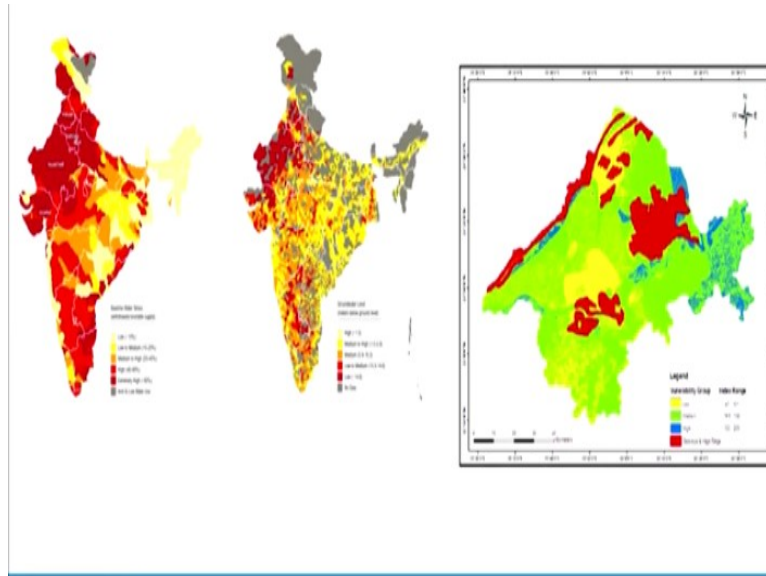
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Now, the one of the useful tools which have come up with the geographic spatial information technology; the GIS tools where you can see from one of my students work of the hazard landslip because the satellite imagery plays an important role but now to what extent, we have to include that satellite imagery at B Arch level or we plan because they deal with much more of a larger scale projects of city planning or the regional planning, for them GIS is already within the subject, in the curriculum.

So, in that way, it was helpful for them to get the drain layouts and as well the hazard landslide intensity maps, so that will give you an overall original understanding as well.

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Also, the GIS is one of the useful tool but one has to know that what scale you have to apply and what scale the macro-level scale to the micro-level scale, how one can understand, the moment it goes to your site-level how this information would be useful, I think that is where the gap comes in between. So, when we say about the psychomotor skills, we also have demonstrated by with the help of Indira Gandhi Rashtriya Manav Sangrahalaya in Bhopal.

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This is a disaster of shelter which has been built by yerukula tribe in 3 hours' time, so we brought them procure the material, we collected the various labourers from different parts of Andhra and then we brought them here and we demonstrated and in this process, what happened is students have learned that even a lightweight hut can be made in 3 hours, you know which is very quick.

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So that has given, which is very indigenous but one has to learn that skill. Also, when I was a student in Oxford, my faculty have taken us to the centre for alternative technologies to test various technologies, the local technologies you know how we can make it work so, this is all the hands-on training which will remain in the students mind forever.

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Also, when I was doing my research, I used to engage some of the B. Arch students along with me, I should take them to the villages and they used to interact with the villagers, they used to interact with various council development activities and you know, the lot of discussions, living with the villagers and knowing their difficulties and that has really opened a third eye for them you know, before that they were all imagining a different context, when they started interacting with it, it was a very different experience for them.

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And similarly, some of the things what I also developed is; we have so much of information to read but how much to read and how to synthesize, it is a very important aspect, unfortunately, for each course there is a lack of reading materials for DRR and build back better and this is a very great need that we need to develop by topic by topic so, what I try to do is; I used to give them different topics within the groups and then let them compile a lot of information on it.

And then at end of the day, I will compile as a reading material, like this was a subject on climate conditions in Sweden, so in that way, I have given a wide variety of topics, which is falling out on that and then at the end of the day, we do a kind of big poster putting all of this reading material understanding one big poster of it. This is another important technique which we played; this is one role play for DRR.

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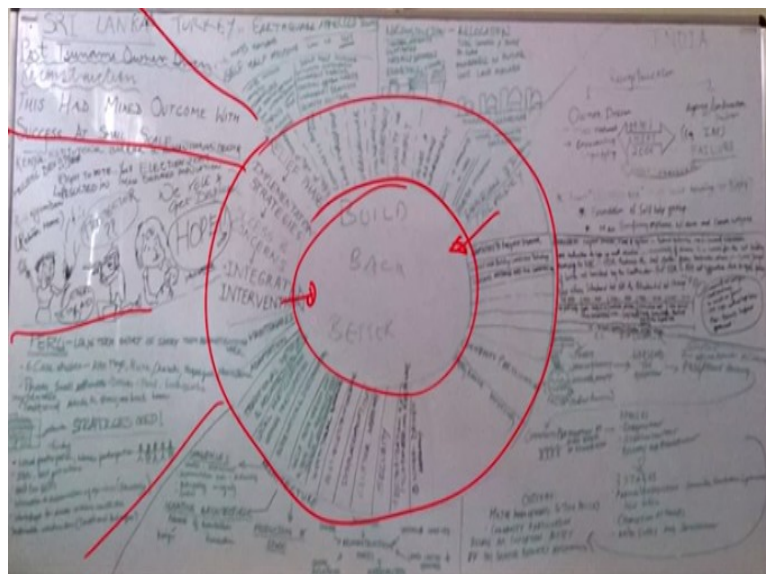


So, here for B plan students in SPA, Bhopal, what we did was we given them a task of a disaster context whether it was a village, under the dam and a flooded area and then we given them, make them into small groups and then we made into like community, engineers, planner, architect, NGO, district collectors, so there is a decision-making, there is a user group, there is a provider group, there is a technical group.

So, all these people will actually discuss the real aspects of it, in a virtual understanding. In fact, as a very important to see how even students have developed a model and brought to me that this is how we want to propose and this is where they counter-argue with the director and how they can establish the funding mechanism, how they will establish the co-operative between community and the technical providers you know, this is all things have been discussed.

Because when you imagine yourself in a different shoe obviously, you think of many other practical situations and this was one of the successful which I can see.

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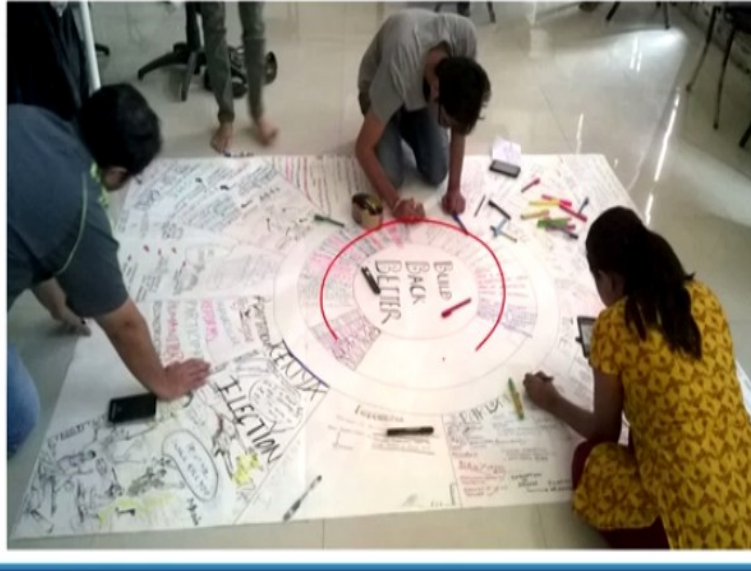


There is another concept, which I have used for teaching build back better is; I used to give them 2, 2 people in a group and then one chapter for the build back better, Michal Lyons and Theo Schilderman's work and then I asked them to read and analyse and make a critical review of their understanding, so then what I do is; I try to first this is a build back better and I leave this as an empty part first, I do not fill this so, this is the skeleton I give them.

And then I give them; each of them a segment of the; this is my blackboard actually, so whatever the discussions we are getting, what they learnt I try to ask them to summarize in this

part so, the moment they are summarizing then I asked them to keep what are the keywords which are informing this so, in that way you can see a very important keywords or security, adaptation, traditional knowledge you know all those things are coming into the picture which is informing the build back better you know, that is how I try to put.

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And then we ask them a big poster, in that process, what happens is the people who do not just study their chapter and forget it, they will summarize it, they will portray it and it becomes a memory for them. Now, if you look at all the circle here, these are all various tools what we learnt, whether it is an insurance, whether it is the participation and all these things.

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So similarly, the end of the workshop will be like this. So, and more importantly, I try to cover different geographical positions like Kenya, Pakistan, Australia or Turkey, China you know, the

variety of geography conditions Lima, Peru, so how they have adopted, how they have faced, what kind of tools they have used, what are the successful things, what is not.

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So, this is how I was trying to develop various methods and obviously, these are all my trial and error process, I am also learning and whatever I did and what I felt was more successful was some of the tools. Here, this the cognitive and effective and the psychomotor skills I tried to addressed in a balanced way because it is not just only by theories and concepts you put it on word and or even the software tools plugging in it but how one can actually critically look at it.

You know, one is by time-wise, how they look at it and by management perspective, how they looked at it, an integrated perspective how they look at it you know and a learning perspective at the end of the day, so this is what I want to present about how to teach build back better, thank you very much.