## **CTL Newsletter**

Monthly Newsletter of the Centre for Teaching and Learning at IIM Udaipur



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## Simulations: Experiential Learning in the Business School classroom

The theme for this edition of the CTL Newspaper is Simulations and experiential learning in the classroom. We have clearly taken advantage of the fact that Prof. Tripat Gill, visiting scholar at IIMU has not only used simulations extensively, but has also designed and created a simulation in the technology innovation diffusion space that is published and distributed by HBSP. In this edition we interview him to gain insights from his vast experience using and developing simulations.

In our literature selections we have two articles, one on experiential learning and how teachers can build a learning environment that supports experiential learning and another that provides guidelines for using simulations and simulation-based training in the classroom. We also have some recommendations on useful tools for research.

INSIDE:

#### SIMULATIONS AS EXPERIENTIAL LEARNING – A CONVERSATION WITH PROF TRIPAT GILL

Discussing the advantages and nuances of using simulations as an experiential learning tool in management classrooms. Prof Gill also shares his journey of building the 'Crossing the Chasm' Simulation.

#### BRIEF NOTES FROM THE SCHOLARSHIP OF TEACHING AND LEARNING

Using Simulation-Based Training to Enhance Management Education

Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education

Happy Reading!

# Simulations as experiential learning – A conversation with Prof Tripat Gill

Prof. Tripat Gill is the Laurier Research Chair in Consumer Insights and Innovation at Wilfrid Laurier University and author and creator of the HBSP simulation - <u>'Crossing the Chasm'</u>

## Could you please elaborate how Simulations are an excellent example of Experiential learning?

Simulation is a great example of experiential learning which is one of several forms of learning by doing. In such activities the learning happens only after you do the task and experience the outcome. You synthesize and reflect on that experience, think about what happened. What was the outcome? What really happened? Why you got the outcome that you got? From that you build some insights that you can use when you make similar decisions again.

Cooking is a great example – most of the time you will only learn from doing. You cannot get to the outcome just by reading a recipe. You know all the ingredients, you know the processes you need to do, but just by knowing that you are not going to be able to make it, because for doing that you are going to have to make it. After making it, you will taste it - that is the outcome and from that over time you will learn to reflect and over time understand what went wrong. Why was the balance not right, flavor is not accurate. Those will come only through reflection and over time you will be able to form some concepts and hypotheses. If your rice is too mushy, next time you use less water - these kinds of hypotheses will form in your mind and that is the whole point of reflecting - using that you make decisions again. Most of the time you do this naturally. Simulation is a way in which you are allowed to do this in a safe environment where you can fail or succeed and then reflect and learn from that.

David Kolb talks about how learning by doing is just one part – the major part is reflection – so simulation allows that reflection that gives you the entire learning.

## In your experience, you have used a variety of pedagogic tools – case, in-class exercises and simulations among others. As a teacher, how do you compare using a simulation to using a case?

I have been using cases for a long time, it is the dominant paradigm in business schools. Starting from Harvard where its almost standardized how we use cases to teach MBAs to make decisions. We tell them to analyze the context, put yourself in that context, look at all the variables and then decide what is the best way forward. But I think we teach them everything about making a decision except they don't make a decision. That I think is the missing piece. We teach them to be a good analysts, but we don't go one step further beyond making the decision. The real test is understanding what is the outcome of the decision. How good was the outcome of the decision compared to the analysis. I think that feedback loop is what is missing in cases.

I have been thinking about that for a while and I have started to use more exercises, especially simulations where you actually have to make a decision. The analysis is not a big part, just one part – you don't spend as much time, but what you really spend time on, is after the outcome go back and analyze again and that is what happens with most decision-making. I think that feedback loop is what makes simulations distinct. I would say in a business school, that is important – because as a manager, decision making is going to be an important part of your work and what you are really going to be tested on is the outcome of the decision, not the analysis. That learning part is what can complement the case pedagogy.

## As a facilitator for simulations in the classroom, what are the important things to remember?

In a simulation you must be more hands off. Let the students do most of the things. Let them make the decisions and experience the outcomes – whether failure or success. They would always be asking you – what should I do? Give me a hint – you must let them figure that out. You don't want to interfere too much. Leave them in the deep end to do the things, experience everything, then towards the end the important part is the debrief where you try to explain to them what was happening and why their outcomes were not according to expectations. What was the underlying logic in this context. They would have understood some of it while doing it but you formalize that learning with the theories that you want to share. So hands-off in the playtime, and debriefing is when you bring in the conceptual understanding.

## How do you use simulations in the classroom? In what ways?

There are two philosophies to use simulations in the classroom – Simulations as application of concept – where you explain the concept and test their application. Cases in a way are to some extent similar. Except with simulations, you go one step further and apply the concept. I have used some simulations like that – Brand maps – where I teach them the brand positioning theory and then they have to decide on how I am going to differentiate my brand compared to competitors in the simulation and learn from it.

The other way is when you use the simulation as a form of discovery where you don't tell them

anything about the concept. They use whatever they know – for example in the Chasm simulation - They know the basics of marketing, but there is something unique in this particular context, especially if you are a startup. So I leave it to them - to apply whatever they know about marketing. As they do that, they learn that what they know about marketing, is not really working well. That's the discovery - that will prime them that something has to be done differently here. Some of them figure it out by trial and error – which is also learning by doing. But once they reflect on that, they figure out that in this context, things work differently. Later when I debrief them, I share why old marketing concepts don't work in the startup/tech space- there are some unique dynamics in the market and you have to do things differently. Then I explain the theory about crossing the Chasm (Geoffery Moore). How in the initial stages the segments are psychologically different, and you have to change your strategy as you move ahead in the market as the product diffuses. That change is what they need to discover. Some of them figure out but then later on this theory will explain to them why that change is needed and how it can be implemented. I usually allow them to do the simulation again, after having learnt the theory, to kind of verify that the theory works. If you're using discovery mode – first time is hands-off. Second time is more in an application mode.



Participants of the Simulation workshop with Prof. Gill

#### Can you walk us through your journey of creating the 'Crossing the Chasm' simulation? How long did the whole process take? How much effort was involved?

It was really interesting. I have been using this Chasm theory in my high tech marketing class for a long time. I created an in-class exercise based on that and I put that in the context of this new technology of self-driving autonomous cars. In that context I created an in-class exercise where I would tell them – imagine you are one of the firms that has this tech and you want to launch it in the market, and you are looking for use cases. There are use-cases in moving people (taxis, etc) or moving goods (parcels, packages, etc). So I create these use-cases and then in a group students have to decide how would you go about launching this you have limited resources. How would you decide which segment to go after, what would be your implementation strategy and so on. I would do this in my in-class exercise because its contemporary. I would have taught the theory, and then they would apply it and realize that in this instance, you really need to put all your eggs in one basket. That is the counter-intuitive part of chasm theory. Most of the time you would like to diversify your risk. That is what students want to do initially – but this theory specifically suggests taking the high risk option as the only way to cross the chasm and establish yourself in only one segment. I tell them and it still seems risky to them. But the exercise doesn't give you the experience of fighting against your intuition, because it involves risk-taking. You can think about it but if you dont experience it, it doesn't feel like a risk. That's the skin in the game part where instead of hypothetically being a manager, you are the manager and your performance is at stake.

I thought simulation would be a great way to put them in the context where they are forced to decide and have stakes in terms of performance against peers and grades involved. That makes it competitive and motivates you to learn about what works. Without stakes you are learning but not with the same focus. Motivation, high stakes, competition, all help to engage students in a business context decision making scenario. This also creates a shared experience with everyone – you see a dynamic in class where everyone is engaged – they are also wanting to know what others are doing. This brings out the benefits of experiential learning.

In one of my meetings with a representative from HBS publishing, I told him that I have been working on an exercise which can perhaps be converted to a simulation. I didn't think much will happen but the project team at HBSP wanted to do more. After an initial one-hour conversation, they were excited because there was no such simulation from the tech world about innovation diffusion. It is quite relevant to a general tech or startup business and so they started the process. I went to Boston where we had a full day 'sprint' session as they call it and I worked with their project team that involves software developers, writers, and others who work on the storyboarding, design, tech, metrics, UI and UX aspects of the simulation to make it manageable, interesting and intuitive. The feedback provided at various stages of the game makes it realistic and interesting – harsh, interesting investor feedback in first person language that hits home. It goes just beyond the numerical outcomes - market share, profits, etc. The visualization of the final results where you can see for yourself where you stand inside or outside the chasm - and compare with others, that makes it really interesting.

After the product was ready, there was a demo for some student participants whose feedback was incorporated. This was followed by a soft launch with about 100 sales team members who all played the simulation. They found it exciting, and thought universities would be interested. It was finally launched in 2018 and so far, the feedback has been good – The product has found a niche in the technology diffusion space. The product has been received well and I am happy that it is being used here at IIM Udaipur as well.

In conversation with Joel Xavier

### Brief notes from the Scholarship of Teaching and Learning

#### Using Simulation-Based Training to Enhance Management Education

Eduardo Salas, Jessica L. Wildman and Ronald F. Piccolo Academy of Management Learning & Education, Dec., 2009, Vol. 8, No. 4

Simulation-based training (SBT) encompasses a continuum of technology intended for training purposes. It includes role playing simulations, physically based simulations, and computer-based simulations. These can be used to impart attitudes, concepts, knowledge, rules, or skills that will improve a student's performance. This article discusses the advantages of SBT for management education and provides practically oriented principles for its effective implementation. Additionally, it highlights emerging areas of research regarding SBT in management education.

Simulations enhance existing management education curricula due to their ability to provide both theory and practice simultaneously. They allow for quicker development of skills as it can collapse time and space, providing rapid feedback after each decision episode. Finally, they accelerate the development of expertise, allowing for students to gain skills and competencies normally only gained over years of experience in a much shorter span of time.

Simulations are an effective strategy for teaching management students' essential skills and competencies. They provide a complex, realistic learning environment that allows trainees to practice their skills in relevant context and with relative safety. Simulations are usually affordable, and simple to learn and operate. They are also inherently more engaging than other methods of training due to its game-based nature, and can provide an enjoyable and motivating medium for learning.

This article outlines seven guidelines for effectively implementing SBT into a management education program. These guidelines include gathering student learning needs, balancing learning needs with costs, taking student characteristics into account when choosing the simulation, providing detailed learning-focused feedback, evaluating SBT directly by measuring students learning outcomes, embedding and automating performance measures within the simulation, and adopting a systems approach to management SBT. These guidelines can help instructors create a successful SBT program that effectively imparts knowledge and skills to students in order for them to be better prepared for the workforce.

#### Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education

Alice Y. Kolb and David A. Kolb Academy of Management Learning & Education, Jun, 2005, Vol. 4, No. 2

While the article discusses many aspects of experiential learning theory, for our summary we have focused on the educational principles suggested by the authors in order to create a learning environment that incorporates "present experiences that live fruitfully and creatively in subsequent experiences".

Respect for learners and their experience -Ensuring respect for learners and their prior experience is critical for a thriving educational model. This necessitates cultivating an inclusive learning community where students feel recognized, valued, and taken seriously by faculty. Conversely, mis-educative environments can lead to feelings of alienation and devaluation among learners. Therefore, prioritizing respect and recognition of students is crucial for educational institutions, including the most reputable ones, to establish an effective learning experience.

Learning with the Learner's Experience of the Subject Matter - To facilitate effective learning, teachers must first delve into the experiences and beliefs of their students. By doing so, teachers can access the zone of proximal development of the learners and can reframe conceptual understanding based on students existing knowledge. Prior knowledge encoded in neuronal networks within the brain, may be impervious to revision through the mere explanation of a teacher.



Creating and Holding a Hospitable Space for Learning - Establishing and maintaining a welcoming learning environment necessitates a climate or culture of support that instills confidence in the learner that they will be supported over time. A challenging and supportive learning space must extend a spirit of hospitality to newcomers, prioritizing life experiences as the principal source of growth and maturation.

Making Space for Conversational Learning -Allowing room for productive discussions in the classroom can foster significant opportunities for meaningful learning. Conversational Learning outlines the key dimensions of spaces that facilitate effective conversations, including the integration of thinking and feeling, speaking, and listening, leadership and unity, acknowledgement of individuality and relationships, and discursive and recursive processes. When these dimensions are not properly balanced, conversational learning becomes less effective.

#### Making Space for Development of Expertise -

Higher education curricula must move away from superficial learning and create space for effective and experiential learning that aligns with students' life purpose. By doing so, students will develop deep knowledge, organizational skills, and the ability to transfer knowledge to different contexts, which are essential for developing expertise. Ultimately, this will benefit both the students and society, as they will be better equipped to tackle complex issues and make meaningful contributions in their chosen fields.

#### Making Spaces for Acting and Reflecting -

Providing room for active reflection and conversation as an integral part of the educational process offers an opportunity for meaningful experiential learning. Dewey's educational philosophy highlights the importance of striking a balance between doing and receiving in the learning process. Action is a crucial component of the learning cycle as it facilitates the integration of internal reflection and thought with the external world of experiences created by action. Active reflection is key to enhancing learning derived from experience.

Making Spaces for Feeling and Thinking -Research demonstrates that reason and emotion are interconnected in the learning process. Negative emotions such as fear and anxiety can impede learning, whereas positive emotions such as attraction and interest can facilitate it. To establish effective learning environments, institutions must create room for both emotions and cognitive processes to promote successful learning.

Making Space for Inside-Out Learning - Inside-out learning is a pedagogical approach in which learners begin with themselves and their interests to enhance motivation and effectiveness. Emphasizing inside-out learning in educational spaces can help foster interest and commitment, as extrinsic rewards may displace intrinsic motivation.

Making Space for Learners to Take Charge of Their Own Learning - Enabling learners to take charge of their own learning can significantly enhance their ability to learn from experiences. This process, known as self-authorship or increasing a student's capacity for self-direction, involves actively constructing one's own knowledge instead of passively receiving knowledge from others. To promote active learning, various strategies can be implemented, including developing meta-cognitive skills and understanding learning styles. For instance, workshops such as the "Connecting with the Professor" can assist students in selecting electives (with teaching styles) that align with their learning style. By adopting these strategies, students can become more responsible for their own learning, leading to increased effectiveness in the learning process.

## Tech hacks

We have been discussing the application of AI in various aspects of education. Recently Prof. Amogh Kumbargeri shared two interesting tools that he came across in a workshop on research writing. Sharing them here with his permission.

#### **Connected papers**

How often have you taken a deep dive into the bibliography of an interesting paper trying to find the other related literature. Its an endless rabbit hole that can be tedious and mentally draining. <u>Connected papers</u> is an online tool that helps you review the entire landscape within which the paper-of-interest resides and it helps you do it graphically (see sample created for Kolb's paper mentioned earlier in the newsletter). It also gives you a handy list on the left and easy to glance through abstracts on the right of your screen. This might just save you a lot of time in the literature review for your next paper.



#### Elicit.org

How often has it occurred that you want to find and review research articles that use the same or similar outcomes to the one that you intend to? Or you are looking for papers that use a similar intervention? <u>Elicit.org</u> is a tool that allows you to ask for research articles related to a topic and when the tool throws up a research paper, it very handily summarizes responses to questions like what did the authors test? What outcomes did they measure? What were the population characteristics? Can I trust this paper? Possible critiques (they check whether any methodological flaws have been published). Extremely useful!

Do share your feedback if you try any of these tools. If you use some secret weapons to make life easier, please let us know so we can do a review.

Thanks Prof. Amogh K. for sharing!

#### Feedback

Please click on the link below to share your feedback and comments and to let us know what kind of content you would like to read about in future newsletters.

#### https://forms.gle/oT73PwW9tafiTmXb7

For queries or for making a guest contribution, please contact the Centre for Teaching and Learning at <u>ctl@iimu.ac.in</u>

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## Updates from CTL

## FDP workshop on Using Simulations in the classroom

CTL organized a faculty development workshop on the topic of Simulations as a means of experiential learning. Prof. Tripat Gill was the key resource person who led the discussion and demonstration for the group of faculty and PhD Students on 23 February.

In the first session, Prof. Gill highlighted the benefits of using simulations as an experiential learning pedagogy and its advantages the method presents over cases. He also shared his journey of developing the 'Crossing the chasm' simulation published by HBSP which is a unique simulation that highlights a counter-intuitive concept from the technology innovation diffusion space. The second session was a demonstration of the simulation itself where the participants played the simulation and Prof. Gill gave a demonstration of the hands-off approach in the first half and the importance of the debriefing in the second half.

During the Q&A, Prof. Ankur Kapoor and Jayant Nasa shared insights from their experience of using the same simulation in their marketing course in this academic year. An interesting observation was that in Ankur's class, students who would normally be silent in class ended up performing significantly better than those who are more vocal in case discussions. Could this possibly mean that there may be a set of students – say silent performers - who don't necessarily speak much in class but are far more skilled when it comes to application? Does this make a case for recruiters to use simulations to zero in on these silent performers? Is this why the consulting firms prefer high academic performers – because they are looking for better analysts?

Please share your views in the open ended comments section of the feedback for this newsletter.

-Joel Xavier