From Teaching to Learning; Becoming Coach for Learning by Doing to Build Educational Capacity in Nepal

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Abstract
Transformation from a teacher to a learning facilitator is a challenging task; the essence of learning is complex, because at the center of it are sets of actions and thoughts interrelated to each other in different ways. There are various ways for the learning facilitator to support the learner depending on the educational design and the personalities involved. This transformation is needed because the world is becoming more interconnected and its problems are more complex. The skills to support learning of problem solving and development are essential in preparing students to develop solutions for changing needs of the society. This study describes experiences of teachers who are developing skills from instruction-based teaching to facilitation-based learning to be able to coach students in interdisciplinary project studies. Data has been collected in Nepal during BUCSBIN-project (2017-2020) which is a Finnish capacity building project to support Nepalese HEIs to transform their education and support entrepreneurship. Multiple data collection methods have been used; feedback surveys, interactive feedback methods, in-depth interviews and written self-evaluations. Data was collected from 105 respondents between April 2018 and November 2019. Results show that most participants identify finding a new framework for their work. A considerable amount of the respondents was also reflecting on their professional and personal development. This study focuses on examining the results more closely and reflecting on the trainer's own experiences. Both qualitative and quantitative data is used when reporting the results.

Keywords: Learning facilitation, transformative learning, teacher education, teacher identity, future higher education, Nepal

1. Introduction

Higher education institutes are challenged to transform their way of teaching and learning to fit better to the needs of changing work life and societies. This means that teachers also need to change their way of working; transferring knowledge is not sufficient and purposeful, since the knowledge is easily found. What educators need to do is to prepare our students to future worklife; with appropriate skills, competences and attitudes.

All over the world university teachers are not trained as teachers. They are often professionals eager to share their knowhow with the students. As Brancato (2003) has stated "educators are often ill-prepared to teach; they identify more with their disciplinary interests and less with teaching practice". From the students and society's point of view it is problematic to have teachers who are themselves more interested about delivering soon expiring information than capable to empower students to learn how to learn. Especially because many of the existing professions will be disappearing; many situations the knowledge and skills taught to students are already inaccurate before students are graduating e.g. in UK more than 30% of the graduates find themselves miss-matched for a job when they graduate (Universities UK, 2015). Instead to educate students to specific knowledge, they should be trained e.g. to find and assess the relevant information, to work as an interdisciplinary team member, to better understand who they are and to be able to develop new ways to solve needs of the societies and communities.

Many of us teaching today have been taught in teacher centered way - teacher speaking and telling what students should learn. According to Cranton & King (2003) we value the scientific knowledge and strongly believe that the role of the teacher is to speak and share the knowledge and the role of students is to listen and remember. Many of us are aware that this is not the best way to learn, but we keep on doing it, because that it the way we have been learning ourselves. However, when thinking that students of today will be future professionals, solving problems that we have no idea today, for them learning should be process of communication, where remembering, applying, understanding and further developing should be the driving force of learning. The nature of learning should be reflective, because we never know what are the needs of future are.

2. LAB Studio Model

The LAB studio model (LSM) is based on learning by doing and reflective learning which suggests a more practical approach to professional education and aims to bridge the gap between academia and the work life. Schön (1983) summarizes this process as reflective practice or "knowing- and reflecting--in--action". The LAB studio model combines together an international and interdisciplinary group of students to work together on solving real problems from the society, organizations or companies. Students work in teams. Learning in based on reflective practice both on an individual level as well as on a team level. LSM has been developed by Oulu University of Applied Sciences (Oamk) from Oulu, Finland. LSM enables learning of 21st Century Skills in higher education by educating self-directed learners who are active and concerned citizens (Karjalainen, Seppänen & Heikkinen, 2016).

Learning in LAB Studio Model is led by students and fostered by a LAB Master, who acts as a supervisor of learning and directs the students to find and build new knowledge, skills and attitudes. A LAB Master is always a part of a team, preferably interdisciplinary, of coaches and tutors, who are either experts of required fields e.g. health, marketing or ICT (coaches) or experts of team development process (tutors). A LAB Master needs to be able to enable learning by doing of the students, design learning processes and suitable methods, be in contact with companies and organizations as well as work with tutors and coaches for the best learning results from students learning point of view. The roles and responsibilities of a LAB Master could be perhaps best explained as being a chameleon who changes according to the needs of students, other team members or companies / organizations.

2.1 LAB Studio model processes and practices

It has been recognized that there are five distinct processes that are supported by the learning activities and managed by the LAB Masters which run through the LSM based studies in a reflective practice. These include the personal development process and professional learning process which require the participant to inspect how they deal with novel situations and often the interdisciplinary group sheds new light to their own skills as they may solely represent their field of study. Product development process starts from a problem and by iteratively building understanding with prototypes finishes with a demo. As the learning happens in teams there is also a team development process that has reflective phases in it. Lastly the entire group of teams forms a supportive, collaborative and encouraging learning community. Each process has its moments of reflection.

3. The BUCSBIN Project

BUCSBIN (Building University Capacity for Business Incubation in Nepal) -project (2017-2020) is a project funded by the Ministry for Foreign Affairs of Finland as a part of The Higher Education Institutions Institutional Cooperation Instrument (HEI ICI). HEI ICI supports cooperation projects between higher education institutions in Finland and the developing world that are designed to enhance higher education provision in these countries. The projects support the higher education institutions in developing their subject-specific, methodological, educational and administrative capacities. (Finnish National Agency for Education, 2019.)

BUCSBIN-project participants have been teachers and administration staff from two higher education institutes in Kathmandu, Nepal. Project aims to develop skills, knowledge and disposition toward project-based learning to implement LAB Studio Model (LSM) based studies. BUCSBIN training has been conducted by Finnish LAB Masters from Oamk.

In BUCSBIN the goal of the training was to prepare teachers to have mindset and skills to run education focusing supporting future needs and competences. LSM challenges teachers to employ a learner centered approach and coaching methods to become a learning facilitator. Figure 1 shows the timeline of the training process. The process has been modelled based on the Learning by doing approach similar to the experience of a student in an LSM based study. The level of difficulty of the tasks, personal responsibility and amount of freedom raise gradually. In the initial phase

participants would hear keynotes and see activities. Later participants would get a student experience in a workshop setting. After the participation experience organizations chose a smaller group of participants to continue developing their skills towards becoming LAB Masters. Together the LAB Master apprentices and Finnish LAB Masters ran workshop for Nepali and international students in June 2018. For October 2018 workshop the Nepali LAB Master Apprentices were in charge of planning and running the workshop with Finnish LAB Masters observing and giving feedback.

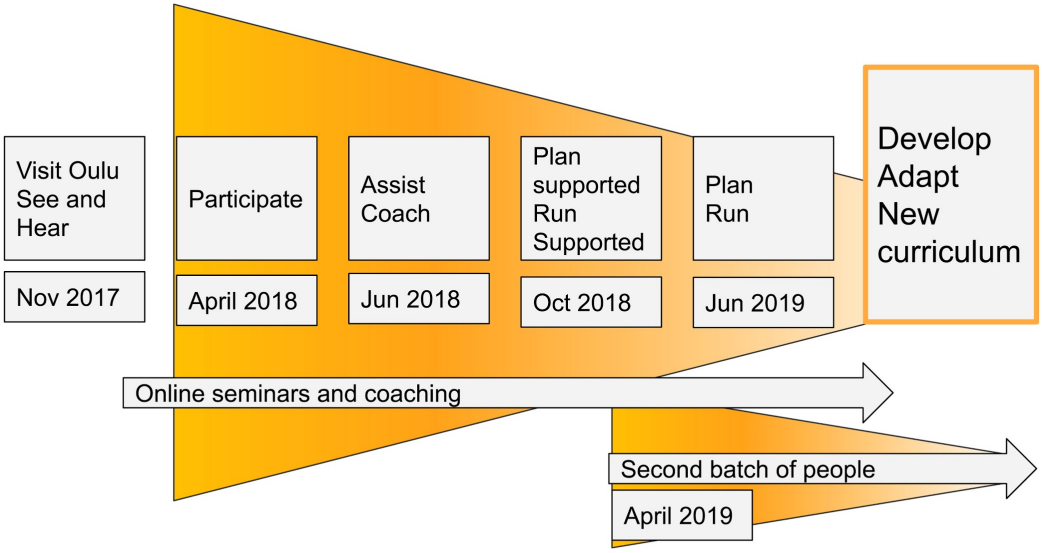

Figure 1: Training process in the BUCSBIN project

4. Transformative learning

What then are the learning that should happen in a teacher, when transferring from teacher centered way to become a learning facilitator? Transformative Learning Theory has been developed since 1970´s and it has been the most commonly used adult learning theory (King, 2002). Transformative learning is a reflective process (Figure 2), where values, assumptions, beliefs and ways of doing things are questioned. It is a way of learning where the teacher is asking from him/herself questions like "What happened here?", "Why is this important?" or "How come I´m thinking this way? In that process of change that is leading the teacher to open up one's own frame of reference, shift from the old habits to better working habits and to find alternative ways of learning and teaching. (Cranton & King, 2003.)

According to Mezirow (2000) changing perspective, leading to transformative learning happens seldom. Transformative learning could be the result of two different kinds of processes; either it happens quite suddenly (epochal) and it is connected to a life crisis or major life transition or it is a slower process (incremental) where accumulation of transformations in meaning schemes will happen over time. Transformative Learning focuses on how to learn to discuss, reflect and act on one's

own purposes, values, feelings and meanings rather than things one has assimilated from others without critically evaluating them.

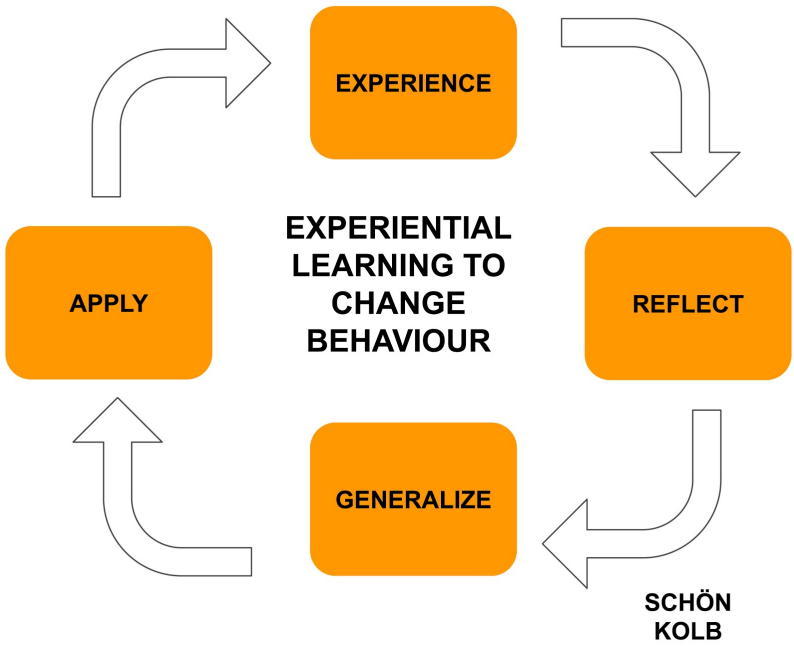

Figure 2: The Reflective cycle

5. Methodology

5.1 Purpose of the study

This study is to describe the experiences of teachers who are developing skills from instruction-based teaching to facilitation-based learning to be able to coach students in interdisciplinary project studies.

5.2 Sources of data

Data was collected between April 2018 – November 2019. Participants of this study are teachers and other faculty members from two higher education institutions from Nepal. One of the higher education institutions is a private institution with 20 full time staff members. The other higher education institution is a public one with 492 staff members. Data was collected by electronic survey (n=83), by written self-evaluations (n=8) and by in-depth interviews (n=14). For the electronic survey there were also other participants from other higher education institutions as well as from companies. All together there were 105 persons. In Table 1 the participants are presented based on what phase of data collection they were participating and what was their background organization.

5.3 Instruments

Three data collection methods were used: an electronic survey, written self-evaluations and in-depth interviews. The data by the electronic survey (n=83) was collected after participants participated in a four-day workshop and pedagogical

seminar in April 2018 and April 2019. The electronic survey was sent to the participants a few days after the workshop and they could answer it anonymously. In June 2019 written self-evaluations were done after participants of this study (n=8) were observing and coaching students a student pilot. Self-evaluations were sent by email to one of the researchers. The last part of the data was collected by having in-depth interviews (n=14) in October-November 2019. These interviews were taken by both researchers. They were recorded for research purposes.

Data collection method	Why method was used	Private HEI	Public HEI	Other participants	All together
Electronic survey	Collect feedback, to understand the starting points of learning of participants	24 (29%)	47 (57%)	12 (14%)	83 (100%)
Written self-evaluation	To support and force participants to reflect		8 (100%)		8 (100%)
In depth interviews	To understand the learning process of LAB Master apprentice	2 (14%)	12 (86%)		14 (100%)
		26	67	12	105 (100%)

Table 1: Data collection methods and participants

Data was analyzed by using content analysis. Content analysis was used to analyze both quantitative (Pietilä 1973) and qualitative data (Janhonen & Nikkonen 2003). Content analysis is used when data needs to be categorized in a certain way. In this research quantitative analysis to used mainly for understanding better who the participants were. Qualitative content analysis has been used for qualitative data from self-evaluations and for analyzing the interviews.

6. Results

Based on the analysis from the interviews few key findings were found; different personal paths to enter the education, importance of personal experiences about the pedagogical method and team teaching.

Teachers had basically two different paths to join the teacher training; either they have themselves somehow recognized personal need and hope to change as a teacher or they were told by their management to join the training. Those teachers who had personal interest to change have not only been reflecting about what has happened with their students in learning situations, but also how their own ways of teaching and attitudes towards learning itself have changed. These teachers joined the educational process early and were committed to self-development.

"In our context we never learn how to become a teacher. So you choose to become a teacher, and there is such a degree there and becoming a teacher is that you remember the best teacher you had and you try to imitate, so that was how it was. So I was trying kind of imitating my professors, like balancing to find different projects, but then I was not, I was really strict and rude kind of a teacher before BUCSBIN happened to me." (LAB Master apprentice 3)

"And then workshop happened in Summit. So that point was quite changing, transforming for me because I understood a lot of things. Like I also understood how you can do bad [as a teacher]." (LAB Master apprentice 3)

"You do not become a LAB Master overnight. But it is a long process, like me, I was participant first, then observing event and coaching and do things as a coach. It is a gradual process, that you have to go through step by step. There are so many things you have to learn like the process and the tools and activities and everything. So it is not something that can be done in a day or two. It takes time." (LAB Master apprentice 1)

On the other hand, there are also teachers who have been joining the educational program from the beginning and their take-away was only copying and using new methods on their own courses.

"Of course, I have been giving feedback to the students ... But I was not doing it in a systematic way. But once I get to know, when I observed the BUCSBIN, it was that, that is the correct method of doing it. So it gave me chance for providing methods and the system I was particularly using for my own course." (LAB Master apprentice 2)

Teachers who have had support and resources from their organizations have been able to realize a larger scale change in themselves and in their institutions.

Another finding was that at the beginning of the process, it is important to have personal experience about learning by doing since many teachers did not have experience about this. We realized that one's own experience as a participant and experience of assisting the workshop facilitator are needed to have more clear understanding what this kind of learning is about.

"Listening was not enough, obviously. Because we are listening someone else, somebody is telling us things. But when we go and experience the things on our own, it is then when we learn." (LAB Master apprentice 1)

"The entire concept of learning by doing was very useful because rather than simply reading books or literature we remember it one day and will ultimately forget it the other day. But if we try to apply or execute our knowledge then, we get so attached to it with both my minds and heart that the knowledge forever will remain within us." (Workshop participant 1)

"There are many tools used in the workshop that I believe I can take into my classroom and my daily life. Time management and the saying that there is

'never enough time' is a philosophical take away. Hopefully my classes become more interesting. I have more empathy towards my students and shall always look to improving learning experience by trying to see it from their point of view." (Workshop participant 2)

Many participants raised the issue of team teaching as a new and sometimes challenging way of working while recognizing it value. Communication among the teacher team is essential for a successful program and being able to teach an interdisciplinary team.

"*Even the coordination bit, the coordination, the planning, the communication. Because communication between the two lab masters I think that is something very, very important. And if like you know, because honestly speaking, there has been some problems between [LAB Master Apprentice] and [LAB Master Apprentice], even in communication and stuff like that. Which made it difficult for coaches as well."* (LAB Master apprentice 1)

"Communication and transparency, that is really important. So that is also important. Coaches are not a problem in case of KUSOM, but like those people who take that role, they need to be responsible and accountable for it. That is really important." (LAB Master apprentice 2)

7. Conclusions

To change one's mind is not an easy process and it takes time. Furthermore, the transformation might take even more time in Nepal as the style of learning, interaction and the cultural norms in Nepal are more hierarchical. To our surprise the concept of reflection was not familiar to all the teachers who were participating in our trainings. We should have anticipated this and included so more pedagogical foundations in our trainings.

It has proved sometimes challenging to go from educating followers to collaborating as peers after the training. LAB Apprentices this refer to the trainers and look for approval for their adaptations to the LAB Studio Model even though adapting to local needs has been recognized as a need from the beginning. Another factor in unwillingness to adapt the model might be that it is hard to abstract up from one experience and as trainers we have not been able to differentiate between the model and one instance of the model. This presents a challenge for future training projects and inquiry.

The educational process, (Figure 3) that has been developing during BUCSBIN, challenges the participant to explore one's existing ways to think, act and identify oneself as a teacher. It also forces participants to think in a different way one´s relation with learners. Some of the participants are ready to start a process of transformation, for others it might not be needed and for some it might be just for a moment a thing that disturbs their way of thinking. Transformation has happened in those teachers who have felt a personal need to change and have had the support from their peers and their organization to use the time. Based on the data gathered, we know that for these teachers who have been brave to take this path of changing

oneself, it has been a positive experience that has raised their professional self-awareness and made them more permissive for themselves and for their students.

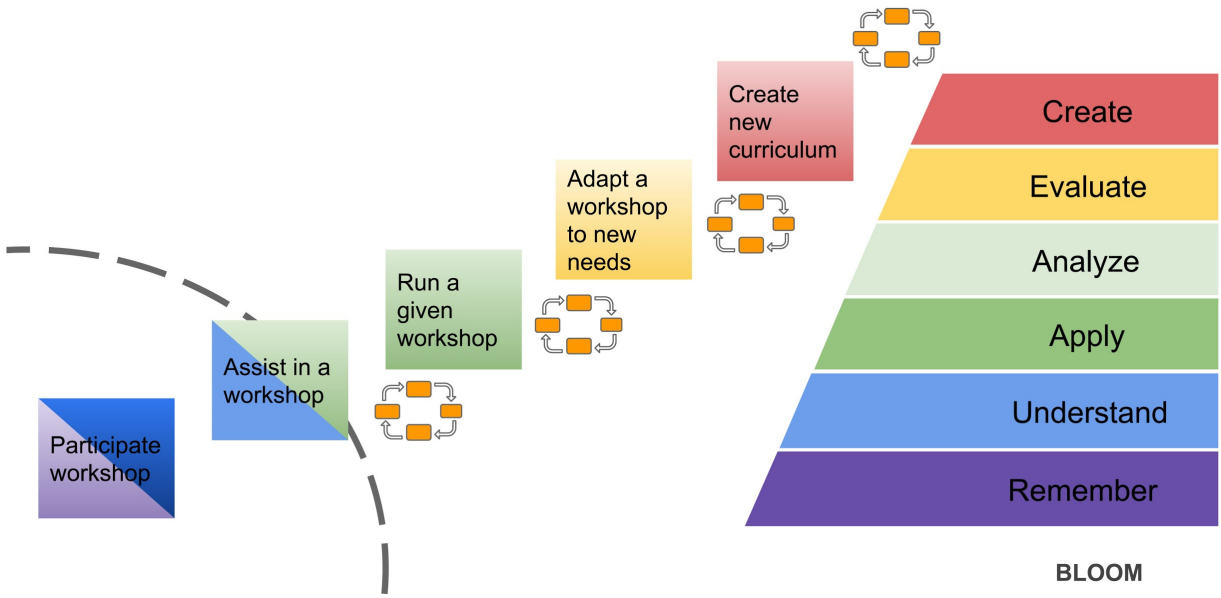

Figure 3: Activities enabling learning and Bloom's Taxonomy

In the future we are hoping to continue developing the learning model and better supporting teachers willing to develop themselves as teachers. We are also looking forward to go deeper into the data and explore it better.

References

Brancato, V.C. 2003. Professional Development in Higher Education. Journal of New Directions for Adult and Continuing Education. Vol. 2003. Issue 98. Pp. 59-66.

Cranton, P. & King, K.P. 2003 Transformative Learning as a Professional Development Goal. Journal of New Directions for Adult and Continuing Education. Voi. 2003. Issue 98. Pp. 31-37.

Finnish National Agency for Education. 2019. HEI ICI Programme. https://www.oph.fi/en/programmes/hei-ici-programme read 5.11.2019.

Janhonen, S. & Nikkonen, M. 2003. Laadulliset tutkimusmenetelmät hoitotieteessä [Qualitative research methods in health sciences]. 2nd edition. WSOY. Helsinki.

Karjalainen, J., Seppänen, U-M. & Heikkinen, K-P. (2016). Oamk LABs practices for bridging work life 21th century skills and higher education. Uas Journal. Special edition with EAPRIL. https://uasjournal.fi/in-english/oamk-labs-practices-for-bridging-work-life-21th-century-skills-and-higher-education/

King, K.P. 2002. Education technology professional development as transformative learning opportunities. Journal of Computers and Education. 39(2002). Pp. 283-297.

Mezirow, J. 2000. Learning to Think Like an Adult. Core Concepts of Transformative Theory. In J. Mezirow & Associates. Learning as Transformation. Critical Perspectives on a Theory in Progress. Jossey-Bass. San Francisco.

Pietilä, V. 1976. Sisällön erittely [Content analysis]. 2nd edition. Gaudeamus. Helsinki.

Universities UK, 2019. Supply and Demand for Higher-Level Skills. Woburn House, London. https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/supply-and-demand-for-higher-level-skills.pdf read on 5.11.2019.

Schön, D. 1983. The Reflective Practioner. How Professionals Think in Action. (p. 374). Basic Books.

Schön, D. 1987. Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. Jossey-Bass, San Francisco.

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