

“NETWORKED LEARNING” AT THE MANAGEMENT CENTER INNSBRUCK, AUSTRIA

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Abstract:

Learning is commonly defined as a process combining cognitive, emotional, and environmental influences and experiences for acquiring or enhancing changes in one's knowledge, skills, values, and world views. It comprises the way in which information is absorbed, processed, and retained. This process should be enforced through integrated Networked Learning. By this we refer to a process of developing, maintaining and integrating knowledge acquired in different lectures and the communication of this knowledge to the students. At the Management Center Innsbruck, Austria, this concept has successfully been implemented at the Bachelor program of Nonprofit, Social and Health Care Management three years ago by connecting three lectures and the respective lecturers in the field of “Scientific Work”, “Project Management” and “Statistics”. In line with the customary procedure as adopted in scientific tasks and research, the students have to elaborate a problem definition and a specific research question. An external partner from an organization or company is responsible for defining the specific practical problem to be solved. The didactical principles comprise different levels and forms of cooperation:

- between the lecturers,
- within the project team,
- among the project groups and lecturers,
- between the project groups and the external (practice-oriented) partner,
- between the lecturers and the external (practice-oriented) partner.

The key method consists of learning in networks in combination with Experiential Learning, both in relation to others and to learning resources and has to be seen as an innovative approach of sustainable learning.

Keywords: networked learning, experiential learning, integrated learning.

1. THEORETICAL FRAMEWORK

The concept of Networked Learning is commonly focused on the potential of information and communication technology to support connections and collaboration. The Web 2.0 and the Net Generation has revitalized these educational terms (McConnell, Hodgson & Dirckinck-Holmfeld, 2012). “Most networked learning practitioners place high value on the following:

- Cooperation and collaboration in the learning process;
- Working in groups and in communities;
- Discussion and dialogue;
- Self-determination in the learning process;
- Difference and its place as a central learning process;
- Trust and relationship: weak and strong ties;
- Reflexivity and investment of one’s self in the networked learning processes;
- The role technology plays in connecting and mediating.

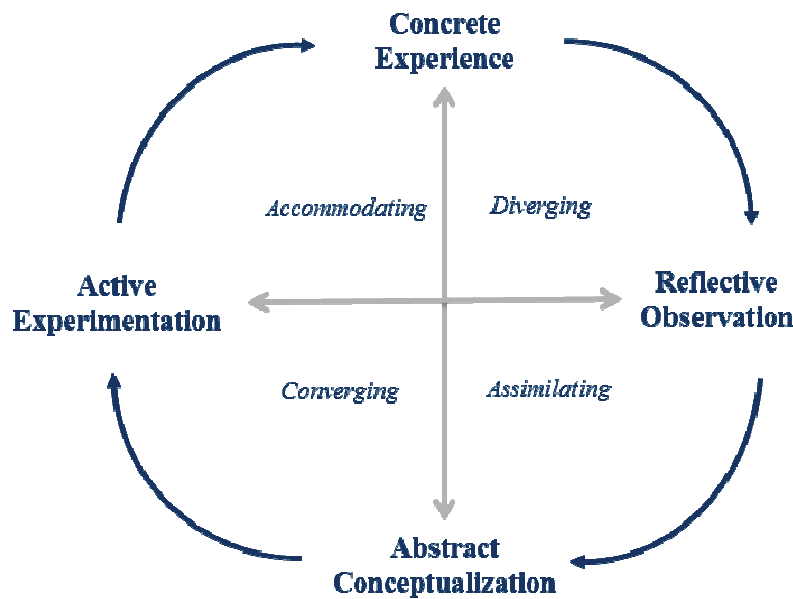
Hence, we can deduct that the practice of networked learning is best acquired from a holistic perspective” (Hodgson, McConnell & Dirckinck-Holmfeld, 2012, p. 295).

Combining this holistic perspective of Networked Learning with learning theories allows to extend the theoretical approach to a new dimension of sustainable learning. Building upon the intellectual origins in the work of Lewin, Dewey and Piaget, the educational theorist David Kolb emphasizes the central role experience plays in the learning process. By means of his experiential learning theory he suggests “a holistic integrative perspective on learning that combines experience, perception, cognition, and behavior” (Kolb, 1984, p. 21).

According to Kolb (1984) this theory presents a cyclical model of learning, consisting of concrete experience “Do”, reflective observation “Observe”, forming abstract concepts “Think”, and testing in new situations “Plan”.

Figure 1 illustrates Kolb’s four-stage learning cycle. It shows how experience is translated through reflection into concepts, which are used for testing in new situations. In the first stage (“Do”) the learner actively experiences an activity. In the second stage (“Observe”) the learner consciously reflects back on that experience. In the third stage (“Think”) the learner attempts to conceptualize a theory or model of what is observed. In the fourth stage (“Plan”) the learner is trying to plan how to test a model or theory or plan for a new experience.

Picture 1: Kolb's Experiential Learning Cycle



Source: Joy & Kolb, 2009, p. 71.

Referring to Joy and Kolb (2009) within this idealized cycle the learner gets in touch with all stages in a recursive process corresponding to the learning situation and the subject matter. It is not necessary to start the learning cycle at a given stage. Four learning styles are identified, which in turn correspond to the stages. “Diverging learners prefer to make more use of concrete experience and reflective observation, assimilating types prefer to learn through reflective observation and abstract conceptualization, converging types rely on abstract conceptualization and active experimentation and accommodating types use active experimentation and concrete experience” (Joy & Kolb, 2009, p. 71).

From the experiential perspective learning is conceived as a continuous process, as opposed to content or outcomes, and grounded in experience. The process of learning requires the resolution of conflicts between opposing ways of dealing with the world. It is a holistic, adaptive process comprising integrated human functioning such as thinking, feeling, perceiving, and behaving. Learning involves transactions between the person and the environment and thus can be seen as a lifelong process of creating knowledge (Kolb, 1984, pp. 26–36).

Taking into consideration the concept of Networked Learning (working in groups, discussion in dialogue, self-determination in the learning process, difference, trust and relationship, reflexivity, using the Web 2.0 tools) in combination with the didactical method of “learning by experience” (do, observe, think, plan) the main challenge is the following: *How could this learning method be integrated into the learning process of students on a practical basis?*

In the field of higher education a growing group of educators see experiential education as a way to revitalize the university curriculum and to cope with many of the changes facing higher education today. For adult students, learning methods that combine study and work, theory and practice provide a more productive arena for learning (Kolb, 1984, pp. 4–6).

2. PRACTICAL APPROACH

Based on the assumption that learning can hardly occur simply by theoretical input, an innovative learning process has been designed at the Management Center Innsbruck in Austria. This concept is successfully being implemented in the form of a one-term interconnection of different lecturers at *the Bachelor program of Nonprofit, Social and Health Care Management*, integrating instruction on “Scientific Work & Integrative Projects”, “Project Management” and “Statistics”.

In line with the customary procedure as adopted in scientific tasks and research, the students have to elaborate a problem definition and a specific research question. An external partner from an organization or company is responsible for defining the specific practical problem to be solved.

It is a student-centered approach involving the experience of working on a real project, followed by a process of reflection assisted by the lecturer, conceptualization based on theoretical reflection and empirical research, and applying what has been learned. This process is achieved by an integrative perspective on learning in networks and focuses on the vivid exchange of information between different stakeholders. The concept comprises a process of developing, maintaining and integrating the knowledge of different lecturers, and the articulate communication of this knowledge to the students. The students are actively participating during the whole learning process. They are involved and interactive, and encouraged to engage in communication and group work. The role of the lecturer is to manage the learning process rather than to manage the content of learning. All these aspects of information and communication are supported by using the advantages of the internet, the Web 2.0: Beside e-mails, presentation tools, drop box, blogs, Skype, the open source platform Sakai is used for communication and interaction. Thus the students as adult learners are easily able to share the responsibility for learning with the lecturer and are encouraged to interactively communicate with all stakeholders.

In the context of the lecture on “Scientific Work and Integrated Projects” the designed learning process permits the students

- to work in a self-consistent way,
- to concentrate on a practical research question,
- to act in a team as a team member,
- to conform to the criteria of scientific work, and
- to respect predefined criteria in respect of time, budget and scope.

The following objectives are aimed to be achieved:

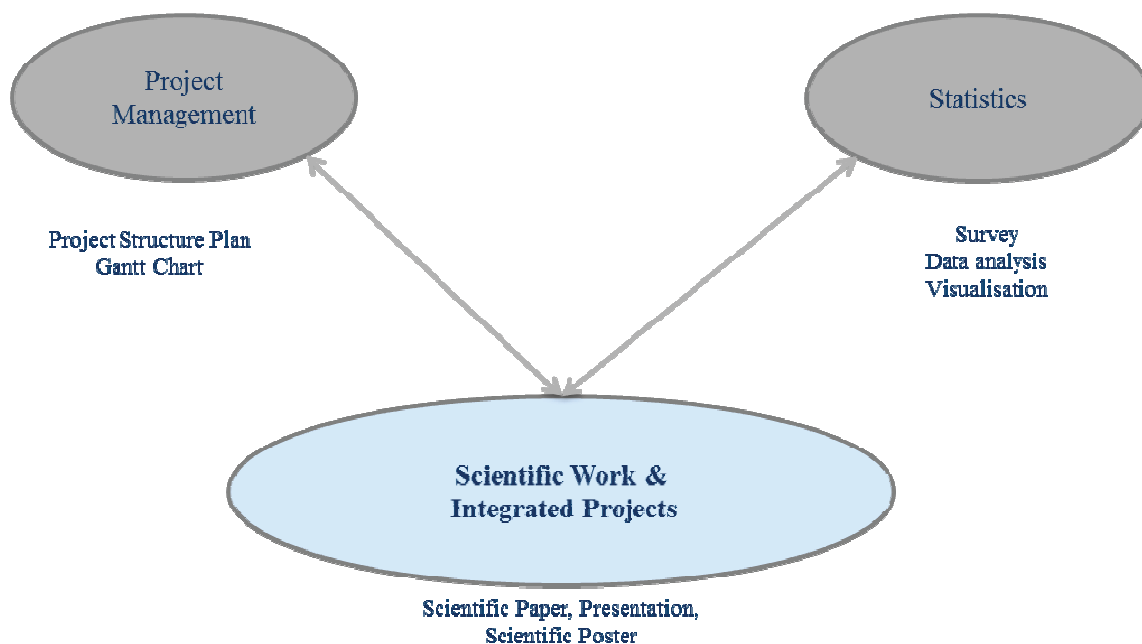
- Clarification of the project charter taking into consideration the research question;
- Formulation and critical reflection of the research question on the basis of the respective literature (library), the respective theoretical foundation;
- Clarification of the empirical research (quantitative or qualitative) on the basis of the elaborated theoretical basis;
- Conducting the survey and analyzing the data;
- Interpretation of the results in a scientific paper by respecting the tools and methods of an academic *modus operandi*;
- Establishing a power point presentation for the oral presentation and producing a scientific poster;
- Preparing for and attending an exhibition to present the results brought about.

The didactical principles comprise different levels and forms of cooperation:

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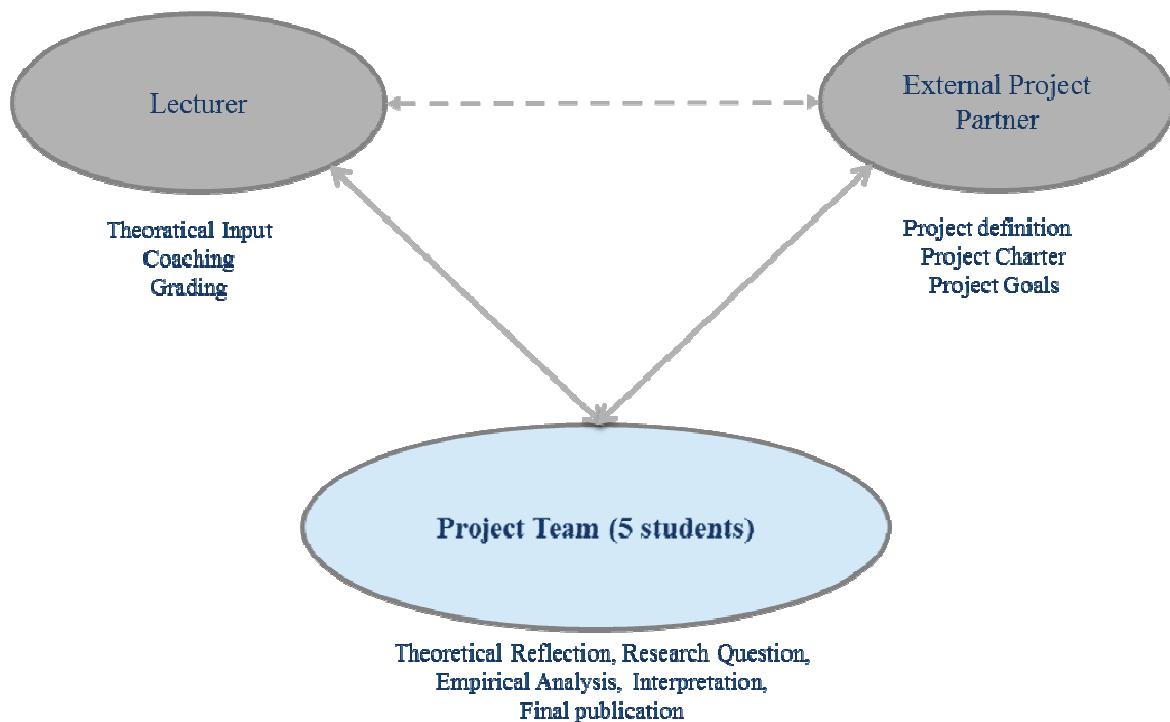
It is important that the lecturers involved collaborate for an optimal outcome of the learning process for student to become true. As shown in the following illustration (figure 2), this refers to the following lecturers involved: Project Management, Statistics, and Scientific Work.

Picture 2: Overview of Networked Learning among individual lecturers



Another challenge of the networked learning process is the combination of internal and external stakeholders (figure 3). Internal stakeholders are the project teams and the involved lecturers. External stakeholders are the respective (practice-oriented) partners. Five students have to cooperate within the team and vis-à-vis the lecturers but also vis-à-vis the external partners.

Picture 3: Networked learning of internal and external stakeholders



The respective lecturer is responsible for the theoretical input, the coaching and grading, the external partner for the relevant project topic, the project charter, the project definition and the network within the respective external environment. There is only little contact during the term between the lecturer and the external partner.

What does this networked collaboration mean in practice? 50 students are admitted per term. This means: five at a time form one team, so that ten teams are operational. In the first lecture of „Scientific Work and Integrated Projects” students have to choose a particular project from a list prepared in broad outlines by an external partner from a company or an organization. This could be an international or national organization such as the Austrian Red Cross, SOS-Children’ Village, Caritas or World Wildlife Fund but might also be a public institution such as the University hospital in Innsbruck or the Tyrolean Government. Other partners are social institutions dealing with e.g. elderly or disabled persons. It is up to the external project partner to outline the project charter together with the students involved and to formulate the respective research question during the first meeting.

3. METHODS AND LEARNING OUTCOME

As described in chapter 1, the method combines Networked Learning and Experiential Learning Theory in order to obtain an optimal learning outcome: concrete experience (“Do”), observation and reflection (“Observe”), forming concepts (“Think”), and testing in new situations (“Plan”). The applied methods are focused on presentations, discussions, group work and different forms of presentation (power point, poster, paper).

The training aspects comprise:

- self-dependent organization and working, handling with restricted resources (“Do”);

- team-based working (being able to collaborate in a group by respecting the team members and by being able to react in an adequate way to being criticized) (“Observe” and “Think”);
- working under complex conditions to achieve the defined objectives / goals (“Plan”).

All this leads to the following learning outcome expected from „Scientific Work and Integrated Projects“. Students will have learnt:

- to structure a project by respecting the content and the limited time (one term, 15 weeks) and restricted budget and by establishing the respective plans for the project break down structure and the Gantt Chart;
- to distinguish between the communication within the group and the lecturer and with the external partner(s);
- to be conscious of the different interests and goals of the actors in terms of a clear role definition and a clear goal agreement;
- to be conscious of the research process (theoretical foundation followed by an empirical research) and the form and content of a scientific paper;
- to bear in mind the obligatory citation rules (to avoid any form of plagiarism);
- to distinguish between the various forms of quotations in the text and in a footnote;
- to train the design of a scientific poster;
- to train the presentation of a project within a given time frame (poster and paper).

4. THE WORLD WIDE LIFE FUND (WWF) EXAMPLE

It would appear helpful for understanding the experiential learning cycle in the context of networked learning by analyzing one specific project and indicating the respective time table.

March (phase of problem definition)

Start of the lecture „Scientific Work and Integrated Projects“ by presenting the topics. Five students select the World Wildlife Fund as external partner. The topic in this specific example is the “Acceptance by the population of hydraulic energy in the region of Tyrol” (one of the nine Laender in the Federal Republic of Austria). They meet the external project partner for the first time and clarify the project order and the research question. Students get input by listening to the introduction lecture of „Scientific Work and Integrated Projects” (How to prepare a scientific paper and poster taking the general research process into account?), followed by the introduction lectures in „Project Management” (How to write a project handbook?) and Statistics (How to create and to interpret quantitative or qualitative data?). During this phase of “Doing” the students gather concrete experience in project preparation and scientific work. They review respective literature in the library and theoretically reflect on the problem in more detail. They learn the importance of Project Management with the respective tools and techniques. The role of the external project partner during this phase is to negotiate the content and extent of the project with the students and provide them with essential information about the organization and/or the chosen topic. The role of the lecturer is to assist the team, if necessary, in organizing the different requirements and to provide the frame conditions for smooth working processes.

April-May (phase of planning, conceptualization and implementation)

The students reflect their experiences and conceptualize their project with regard to the scientific research process. The team is now in a position to describe the problem definition (construction of a hydro-electric power plant in a protected area) followed by the clarification

of the specific aim and the definition of the research question: Is the construction of a hydro-electric power plant accepted also if this affects the protected landscape? Is there any connection between the knowledge of the Tyrolean population on hydraulic energy and the level of acceptance? During a 30 minutes coaching in the lecture „Scientific Work and Integrated Projects” students are getting feedback whether the project with the respective problem definition and research question is possible in view of the restrictions in terms of time, budget and scope. Furthermore, the relevant literature is discussed. This is also the moment to ask questions or discuss possible problems (“process of observing and thinking”). The empirical part takes place in the lecture on „Statistics”. Here students learn the elaboration of a survey. To get representative results in this specific case, students conduct the survey by telephone interviews. These data are analyzed, visualized and interpreted. This process of conceptualization is also supported by the lecture on „Project Management”: establishing a SWOT and stakeholder analysis, creating a Gantt-Chart and producing a project breakdown as the important communication tool for the team work. Students learn the importance of risk management, of controlling (also the social internal and external controlling vis-à-vis the stakeholders), of the documentation process (hand book, minutes ...) of the entire internal and external communication: conversations, information exchanges and outcomes. The main role of the external project partner in this phase is to revise, if necessary, and to approve the survey process. The role of the lecturer is to assist the students in developing the research question, designing the project and applying an adequate research method, through continuous asking and feeding back.

June (phase of presenting & publishing – closure of the project)

Students present their theoretical and empirical results in a first internal presentation during the lecture „Scientific Work and Integrated Projects”. The feedback received is used to adapt and to improve the final publication. The closure event is the final exhibition which not only presents the occasion for the internal stakeholder but also for the public (external partner) to obtain detailed information. The students have the opportunity to present the results in a short 5-minute power point presentation. They are responsible for the designing of their exhibition stand (poster, sweets, decoration, table cloth, flowers etc.). This phase enables the students to compare their own work with that of the other students and thus becomes a valuable contribution and an important incentive for new experiences. It is also the time and place where the publication is handed over to the external partner and to the lecturers. The students get a certificate, which is a useful and important document for the application process after the study. The main role of the lecturer in this phase is to give feedback, assess the teamwork of the students, and support them in arranging the exhibition. It is the platform for exchanging experiences and networking. It is also the time to socialize and celebrate the project closure!

5. CONCLUSIONS

Positive experience and feedback from the students involved over a period of three years, but also external partners from well-known companies or organizations, appreciating this kind of collaboration with a fruitful outcome for both sides underlines the success of the networked lectures based on the theory of experiential learning.

The involvement of different internal and external stakeholders, which makes the “learning event” quite complex demands a clear structure, an excellent communication process with the support of new media tools (internet) and a transparent time table. The intensive assistance, supervision and mentoring of the students involved are important to render this concept successful. The learning effect is by no means confined to only one term. The input has a long

lasting learning effect, to be seen as an innovative approach of sustainable learning also for the future.

Harasim, Hiltz, Teles & Turoff (1995, preface) wrote that “Learning Networks introduce new educational options to strengthen and transform teaching and learning practices, opportunities, and outcomes”. When combining this approach primarily focused on computer networks with the experiential learning cycle of Kolb a more holistic concept emerges and opens a new perspective for sustainable learning.

REFERENCE LIST

1. Harasim, L., Hiltz, S.R., Teles, L., & Turoff, M. (1995). *Learning Networks: A field guide to teaching and learning*. Cambridge, MA: MIT Press.
2. Hodgson, V., McConnell, D., & Dirckinck-Holmfeld, L. (2012). The theory, practice and pedagogy of networked learning. In L. Dirckinck-Holmfeld, V. Hodgson, & D. McConnell (Eds.), *Exploring the Theory, Pedagogy and Practice of Networked Learning* (pp. 291–307). New York, NY: Springer Science+Business Media B.V.
3. Joy, S., & Kolb, D.A. (2009). Are there cultural differences in learning style? *International Journal of Intercultural Relations*, 33, 69–85.
4. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
5. Learning Theories Knowledgebase. (2012, January 13). Experiential Learning (Kolb). *Learning-Theories.com*. Retrieved from <http://www.learning-theories.com/experiential-learning-kolb.html>
6. McConnell, D., Hodgson, V., & Dirckinck-Holmfeld, L. (2012). Networked learning: A brief history and new trends. In L. Dirckinck-Holmfeld, V. Hodgson, & E. McConnell (Eds.), *Exploring the Theory, Pedagogy and Practice of Networked Learning* (pp. 3–27). New York, NY: Springer Science+Business Media B.V.