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Sirpa Niittymäki & Ulla Seppälä-Kavén (eds.)

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Handbook for project hatchery tutors

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TURKU UNIVERSITY OF APPLIED SCIENCES

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Turku University of Applied Sciences
Turku 2014

Authors: Liisa Kairisto-Mertanen, Marjo Kumpula, Sirpa Niittymäki. Meiju Räsänen, Ulla Seppälä-Kavén, Konsta Koivunen & Mika Sillanpää.

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FOR THE READER

The development of teaching methods is a topical challenge in universities of applied sciences. This handbook provides information on how to increase students' readiness for innovation through innovation pedagogy and how to make learning well-rounded and interesting. The handbook focuses on one way to achieve this, i.e. through project hatchery work.

Project hatchery work is a method developed in the Technology, Environment and Business faculty (TYT) of Turku University of Applied Sciences. The method familiarises students with multidisciplinary project work from the very beginning of their studies. The method is counted among the educational research, development and innovation methodologies of innovation pedagogy and trains students to make use of their project work skills in other study units.

This handbook is a revised edition of the first handbook. Different sections of the handbook discuss partly overlapping issues. This makes every chapter not only a part of the whole, but readable as an independent section. The following people contributed to the authoring: director of education Liisa Kairisto-Mertanen, degree programme manager Marjo Kumpula, senior lecturer Sirpa Niittymäki, education planner Meiju Räsänen, senior lecturer Ulla Seppälä-Kavén and students Konsta Koivunen and Mika Sillanpää.

The handbook is meant to function as a guide for teaching staff and students, and is particularly suitable for universities of applied sciences. We would be very happy to receive feedback on this handbook. Such feedback can be sent directly to the authors (first name.last name@turkuamk.fi). The authors can also provide you with further information about training and education related to project hatchery activities.

We hope this handbook will serve you well!

Turku, 17 November 2014
The authors

1 INTRODUCTION

The world is changing at an ever increasing speed and with it our ways of working. Institutions of higher education provide training for tasks that demand initiative and an entrepreneurial attitude. Clear-cut instructions and guidance are becoming increasingly rare. Instead, workers themselves are expected to possess the skills necessary to determine their goals, and the ways and means by which to achieve such goals. The internet and other increasingly sophisticated tools enable group competence and the real-time use of information in day-to-day work, thereby revolutionising the way in which we outline and structure tasks. The amount of information available to us is so vast that discerning irrelevant or unreliable information from relevant and reliable information will be one of the key skills required in the future.

PICTURE 1. *Hatchery tutors in interactive training (picture: Meiju Räsänen).*

Institutions of higher education have traditionally focused on the production of explicit knowledge. This has been appropriate in circumstances where the world has remained relatively unchanged. However, the more rapid the pace of change, the more institutions of higher education should focus on the communication of tacit knowledge, too, in addition to the production of explicit knowledge. Interaction and networking skills, understanding the relations between various phenomena, finding a place for oneself within an operating environment and the interfaces therein are all skills that are difficult to learn in any way other than by trying to – and being – party to various of kinds of activities.

We live in an information society in which added value is generated by way of innovations and innovative activities. Education, and universities of applied sciences in particular, have an essential role to play in the creation of an innovative society. Studies should include modules that guarantee innovative professional competence or even the creation of innovations within institutions of higher education and during studies. Institutions of higher education are expected to have or come up with means to achieve this goal.[1]

According to the strategy of Turku University of Applied Sciences (TUAS), the institution operates according to the principles of innovation pedagogy. The term innovation pedagogy refers to an approach to learning that involves a new way of assimilating, producing and using knowledge to achieve innovative professional competence. Understanding how to produce innovative professional competence has become a central issue. It is our view that innovation competencies are study modules that lead to the birth of innovative professional competence. We must therefore define and understand the factors they are made up of, and subsequently find the methods by which to give rise to innovation competencies and that are suitable for an institution of higher education.

1. Rogers 2003: "Innovation can be understood as an idea, practice or object that individuals see as something new".

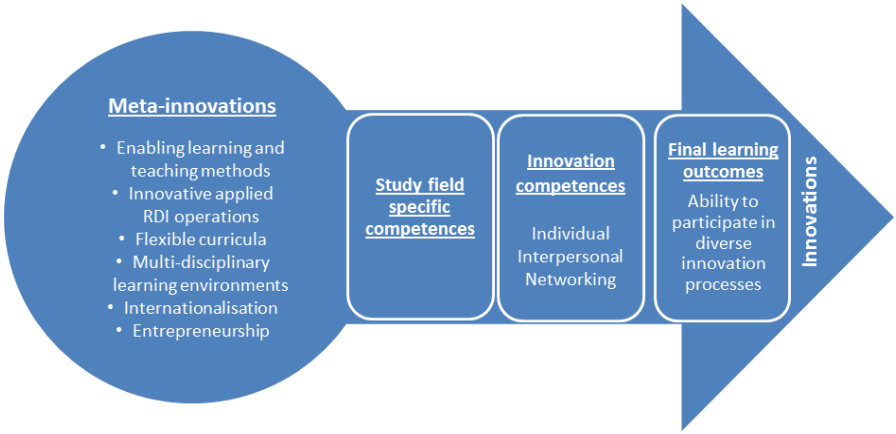

FIGURE 1. *The premises, methods, objectives and learning outcomes of innovation pedagogy (figure: Liisa Kairisto-Mertanen & Taru Penttilä).*

The innovation competencies defined in innovation pedagogy (Figure 1) include, in addition the dimension of individual competences, the important areas of social and networking competences. The activities, knowledge and competence of an individual no longer suffice. Being able to come up with innovations requires individuals to open up their ideas to the scrutiny of others and further development in existing and future networks. What is required in addition to the content skills related to the content field of each degree programme is, among other things, a capacity for interaction, presentation, cultural reading, customer appreciation and cooperation. Students should also know how to make use of other people's knowledge, in addition to being enthusiastic and brave enough to take risks.

Bringing about innovation competence related to multidisciplinary competence is the fundamental objective of innovation pedagogy. The myriad approaches stemming from the diverging perspectives of different fields can be inspiring and open up new paths. It is important to give students room and opportunities for the multidisciplinary encounters taking place in the learning environment during their studies. Integrating research, development and service activities into teaching is one of the cornerstones of innovation pedagogy. Projects provide students with a chance to form an understanding of the world outside their learning environment and to network with working life. Through involvement in projects students also learn how to present issues, tolerate uncertainty and work in a team to achieve a common goal. The

incorporation of projects in studies requires flexible curriculums. The world surrounding the university of applied sciences and in which the students will be employed is, by definition, global. Internationalisation and the attendant ability to read cultures and proficiency in various languages forms a part of professional competence.

In innovation pedagogy, the student's thinking is activated by way of methods that generate knowledge, skills and approaches in line with the study unit's objectives. The customer understanding developed in the course of projects is a good example of the intuitive and inner knowledge related to innovation pedagogy. The ability, born through cooperation, to read the various sub-cultures prevalent in different fields is also a result of this new pedagogy. Future professionals must often be able to cooperate within groups and teams composed of individuals representing a variety of industries and practices. Flexible cooperation requires an understanding of how to build trust and avoid conflicts. The objective of the activity is learning based on a student's own motivation. Maximising each student's potential development depending on their starting level is essential. The learning paths in the processes of different students studying in the same degree programme may differ. Goals set by the student himself or herself guide the activities and guarantee the motivation to learn.

The project hatchery is a method developed at Turku University of Applied Sciences that familiarises students with multidisciplinary work from the very beginning of their studies. It belongs among the educational research, development and innovation methods covered by innovation pedagogy. The objectives of the project hatchery relate to learning various ways of working. Although the objectives concerning the mastery of content and any particular hatchery's topic are secondary, related learning will also take place during the hatchery.

The project hatchery is, in principle, a multidisciplinary course during which students who begin their studies in different degree programmes also get to know one another. One of the defining objectives is the creation of a conducive and inspiring learning environment in which students pull together. The trust created at the very beginning of one's studies also allows for cooperation between various fields as the studies progress and tasks become increasingly demanding.

Through a project hatchery, students are provided with the facilities to participate in other study units belonging to the same group of methods during their studies. After the project hatchery, students are offered the opportunity to take part in a research hatchery, in which the tasks are closely related to the research, development and service activity projects of the university of applied sciences.

2 THE PROJECT HATCHERY IN A NUTSHELL

PICTURE 2. *Brainstorming on a hatchery topic (picture: Martti Komulainen).*

2.1 THE PROJECT HATCHERY CONCEPT

The Technology, Environment and Business faculty of Turku University of Applied Sciences[2] has run a multidisciplinary project hatchery since 2008. The operating model in question is the result of planning by teachers and students alike. The activities have been developed along the way, based on feedback.

2. The faculty of a university of applied sciences consists of several degree programmes. In the spring of 2014, the Technology, Environment and Business faculty of Turku University of Applied Sciences was composed of the degree programmes for automotive and transportation engineering, fisheries and environmental care, sustainable development, mechanical and production engineering, business logistics, design, professional sales, construction and civil engineering, industrial management engineering and environmental technology.

The faculty's first-year students, made up of some 500 students in various degree programmes, work in one the approximately 45 project hatcheries organised by the institution throughout the autumn term. All of the project hatcheries are multidisciplinary in the sense that they include a representative or representatives of each degree programme offered by the faculty. In other words, a single hatchery has students of engineering, business administration, construction management and design. The hatcheries teach students how to work in a multidisciplinary way – a commonplace arrangement in many workplaces, too. A project hatchery provides a student with three credits. It is a mandatory course, graded in the same fashion as any other, on a scale of 1–5. Each teacher tutor is in charge of three or four project hatcheries during the autumn. In each hatchery, the teacher tutor is assisted by a student tutor.

PICTURE 3. *Posters on display (picture: Sirpa Niittymäki).*

During the course of the project hatchery, the student group works on a particular project throughout the autumn term. The work also includes the preparation of a project plan and final essay, as well as the design of a poster. The posters are printed in a printing shop, after which they are put on display in the institution. All of the faculty's students and teachers may participate in a vote on the best poster. One of the most significant aspects of hatchery work is the hatchery presentation held at the end of each hatchery, in which every hatchery group presents their own work to a panel of judges. The panel, composed of teacher and student tutors, selects the best hatchery presentation. The winners of the poster vote and the hatchery presentation are awarded (by, for instance, cinema tickets, glow bowling and a dinner). Finally, the study

unit is evaluated in such a way that, in addition to the teacher's evaluation, the overall evaluation relies upon the peer assessment and self-evaluation of students. The evaluation process is further supported by a tool for measuring innovation competence, developed at Turku University of Applied Sciences. This tool will be described in more detail under section 3.7 (Reporting and assessment of hatchery activities).

2.2 THE OBJECTIVES OF THE PROJECT HATCHERY

The objective of project hatcheries is for students to become familiar with the principles of exploratory work and learning. Students will become adept at working in a multidisciplinary group or team and will get to know students of the faculty's other degree programmes and begin to create the networks necessary in working life. They will also learn important project work skills. The course aims to increase communality within the faculty and introduce students to research, development and innovation (RDI) activities.

The objective of project hatcheries is for the student to:

- become adept at collaborative learning and work,
- learn additional independent working skills,
- learn how to work in a multidisciplinary group and get familiar with the students of other degree programmes,
- develop his or her skills at innovation,
- start creating the networks necessary in working life and studying,
- enhance his or her project work skills,
- increase his or her presentation and interaction skills.

PICTURE 4. *Students of various fields get together in a project hatchery (picture: Matti Kivekäs).*

2.3 PRELIMINARY MEASURES

Successful project hatcheries demand careful planning. They require tutors, facilities and a jointly agreed operational model. Everything is based on a shared understanding of what the project hatchery aims to achieve. The general instructions concerning project hatcheries (see Appendix 1) are updated every year and distributed to everyone involved in hatchery activities.

Teacher tutors

The selection of teacher tutors, and securing these tutors' commitment to hatchery work, is an important phase. One should be able to secure the commitment of tutors who are genuinely interested in the kind of instruction and tutoring that hatchery work involves. In a project hatchery, the teacher's role differs from what it is in the traditional classroom environment. The RDI staff of a university of applied sciences may also take on the role of teacher tutor, thereby facilitating the integration of RDI projects and teaching. Many RDI projects provide fertile ground for hatchery projects. However, when employing people other than teaching staff as tutors, one should make sure that the person in question has the pedagogic skills necessary to instruct students.

We have tried to involve teacher tutors from a variety of degree programmes. Every teacher tutor runs three or four hatcheries, each of which is composed of 12–14 students. Every hatchery also has a student tutor assisting the teacher. The training of teacher tutors, shared planning and regular communication between tutors are all elements essential to successful hatchery activities. The shared training for teacher tutors is arranged as early as during the spring term. In addition, teacher and student tutors hold a joint meeting after hatchery activities have begun. The training for teacher tutors addresses the hatchery's pedagogic objectives, practical implementation and ground rules, as well as the roles of various participants (teacher tutor, student tutor, project manager and hatchery members). It is important for teacher tutors to follow common practices. The students of different hatcheries compare their experiences, and often perceive divergent practices – such as solutions related to evaluation or absences – as unfair. The teacher's roles is discussed in more detail in section 3.1 (The role of the teacher tutor).

Student tutors

In addition to teacher tutors, hatcheries require student tutors – 40 student tutors for every 500 students, for example. From 2008 to 2013, we recruited student tutors primarily via e-mail and our intranet, but since the spring of 2014, students who serve as tutors have completed a study unit called Group tutoring alongside the hatchery activities. The study unit in question is worth five credits. Students accepted into the Group tutoring course are, for the most part, students who have already completed their own hatcheries. Student tutors receive training that orientates them to the task at hand. The following contains an example of the timetable for the Group tutoring course in 2014.

Implementation of student tutors' training

- Kick-off info session
  - 12 March 2014, 2 a.m.–4 p.m., Monitori hall
- 1st training day, Kunstenniemi
  - 29 April 2014, 8 a.m.–5 p.m.
  - departure at 8 a.m. from Sepänkatu
  - return at 4 p.m., Kunstenniemi
- 2nd training day
  - 25 August 2014, 8 a.m.–5 p.m.
  - departure at 8 a.m. from Sepänkatu

    - return at 5 p.m., Kunstenniemi
    - student sauna evening from 6 p.m. ->
- Joint training day, Sepänkatu
    - 5 September 2014, 12 noon–4 p.m.
- Regular team meetings between teacher and student tutors (two per month)

Student tutors are usually second-year students, who themselves have completed the hatchery the previous year. In addition to the credits involved, they will receive a separate certificate for their work as a student tutor. The Group tutoring course includes independent familiarisation with preliminary materials and literature as well as related preliminary assignments and intensive training.

PICTURE 5. *Student tutors attending a training day (picture: Meiju Räsänen).*

Although actual hatchery activities do not begin until September, the Group tutoring course will start in the spring with the kick-off session and the first training day. In connection with the kick-off info, the students are given a

preliminary assignment pertaining to group activity and grouping. The training day held in May will focus on the principles of hatchery work and the application of such principles during the coming autumn and on what group activities and leadership mean in the context of hatchery work. It is particularly important to examine the roles of various people in hatchery work and to commit the student to tutoring work. There will be another training day in August, held before the hatchery work begins. On this occasion, the training will focus on motivation, group activation and commitment to the activity, in addition to common rules applicable to the activities of student tutors.

Following the spring-time training day, every teacher tutor and his or her three or four student tutors get together to plan the hatchery's commencement. In any case, the tutors will meet up again in August prior to the hatchery's beginning, to agree on schedules and other important details.

The training days and meetings will provide student tutors with as clear a picture as possible of their role in the hatchery.

The student tutor's role in a hatchery:

- in charge of student grouping,
- motivates and inspires students,
- provides students with mediation and support,
- serves an intermediary between the teacher tutor and the students.

The student tutor's tasks in the hatchery:

- practical arrangements, particularly during the initial phases of hatchery work,
- presence during hatchery days,
- approachability also in between hatchery days,
- availability (reads e-mails, for instance),
- monitors attendance (a task shared with the project manager),

- serves as the "public face" of the university of applied sciences,
- the management of the overall process together with the teacher,
    - scheduling,
    - the division of labour,
    - the supervision of work,
    - communications,
    - expertise in the methods of the university of applied sciences,
    - assessment and evaluation, in cooperation with the teacher.

Hatchery topics and commissioners

The hatcheries' topics are decided in cooperation by the students and teacher tutors. While some of the ideas for such topics are provided by the institution's RDI parties, others are put forward by businesses or associations and organisations, with which the students or teachers are affiliated or have contacts in. When selecting the topic, it is important to hold a critical discussion so as to ensure that all the hatcheries have, to some extent, equally demanding topics. Although the topics themselves do not fulfil the same criteria, each topic should meet the following ones:

- suitability for a multidisciplinary group,
- provides work for many people,
- sufficiently challenging,
- sufficiently broad in scope,
- innovative.

Furthermore, the topics may fulfil some of the following example criteria:

- allows for a variety of implementation methods,
- commissioned by an actual commissioner, working life topic,
- imaginary topic with no commissioner,
- a topic with a broad scope, focused or narrowed down by the group,
- a topic with a limited scope but nevertheless free method of implementation,
- a topic with a limited scope and restricted method of implementation,
- a concrete topic,
- an abstract topic,
- an indicative topic whose content the students must come up with.

The hatchery topic may therefore be, in line with the above criteria, the organisation of an event or seminar, design or marketing of a product, development or planning of a space/facility, preparation of a handbook or manual, drafting or analysis of a questionnaire or disseminating information of an association or organisation.

A diverse and multidisciplinary topic can, at its best, provide all hatchery members with plenty to do. A sufficiently broad-scoped and innovative topic motivates the participants to seek new solutions and implementation methods. An invented topic with no commissioner may feel difficult at first, but such topics are also suited for project hatchery work. However, RDI projects and the related real-life commissioners provide hatchery groups with the most genuine experiences in project work. Regardless of the topic, it is important to explain to hatchery students that the topic is not an end in itself, and that all topics provide opportunities for fruitful learning projects.

The work of students from various fields in a multidisciplinary group requires interesting and inspiring tasks. The successes and failures involved with a good topic teach the participants what the essential aspects of hatchery work are. Students are motivated when they feel they are learning. As is the case in working life, not all projects always lead to the best possible results. Even though the processing of a hatchery topic may lead to a half-finished output

or even fail to some extent, it does not mean that the topic itself is poor or that the project hatchery as an activity would have been a failure. Even when it "fails", the result can teach the group plenty about project work.

Examples of topics:

- Innovation pedagogy videos
- Exercise day
- The restaurant world of Turku Market Hall
- The interaction forum
- The environmental effects of motoring – facts and attitudes
- Accessibility in the units of an educational institution
- Marketing video for the activities of Turku YMCA
- Leaving for foreign exchange
- Energy efficiency, safety and comfort
- Multilingual guides at waste collection points to enhance sorting
- Resource efficiency in companies based in Southwest Finland
- Floorball tournament for the faculty of Technology, Environment and Business, Leaf Areena
- Pricing models for medical equipment
- Recreational resources for lorry drivers
- Event planning for the 2014 Cheerleading Finnish Championship
- Safety

Other preparations

The premises and facilities for the hatcheries should be booked in the autumn before new students begin their studies, since each hatchery should have its own working space. A normal classroom is suitable for hatchery work, although it is advisable to use a classroom with a computer and a data projector. Other premises, including students' regular meeting places such as cafeterias or halls, are also suitable for hatchery work. Hatcheries must be fitted into students' timetables, to give the students of different degree programmes time to work on the project together. The need for premises may make it more difficult to teach students from other programme years at the same time. The hatcheries are held once a week during a shared period which lasts for three hours at a time. Having students from the years above as tutors requires these students not to have classes of their own to attend during hatchery periods.

In the autumn, prior to the commencement of hatchery activities, all 500 new students are divided up and placed into their respective hatcheries. Due to changes in student lists, this may not be possible until only a few days before the hatcheries begin their work. Students are placed into the different hatcheries randomly, whilst ensuring that every hatchery includes students from all of the degree programmes. Small degree programmes provide one or two students for a single hatchery, while bigger ones can contribute up to four or five students. Students are informed about the concept of project hatcheries[3] and of their respective project hatcheries during what is commonly referred to as the Orientation week. The students may not select the hatchery they will be participating in themselves, since taking into account the preferences of all students would take up too much time during the initial phase of hatchery activities.

Once the hatcheries begin operations, the respective tutors urge students to sign up for the course. The implementation plan has been drawn up in advance, and the tutors agree to work accordingly. The implementation plan goes through the implementation of the course, including evaluation, for example.

3. The Orientation week provides new students with an opportunity to get familiar with the institution, their studies and their study groups.

3 THE PROJECT HATCHERY IN ACTION

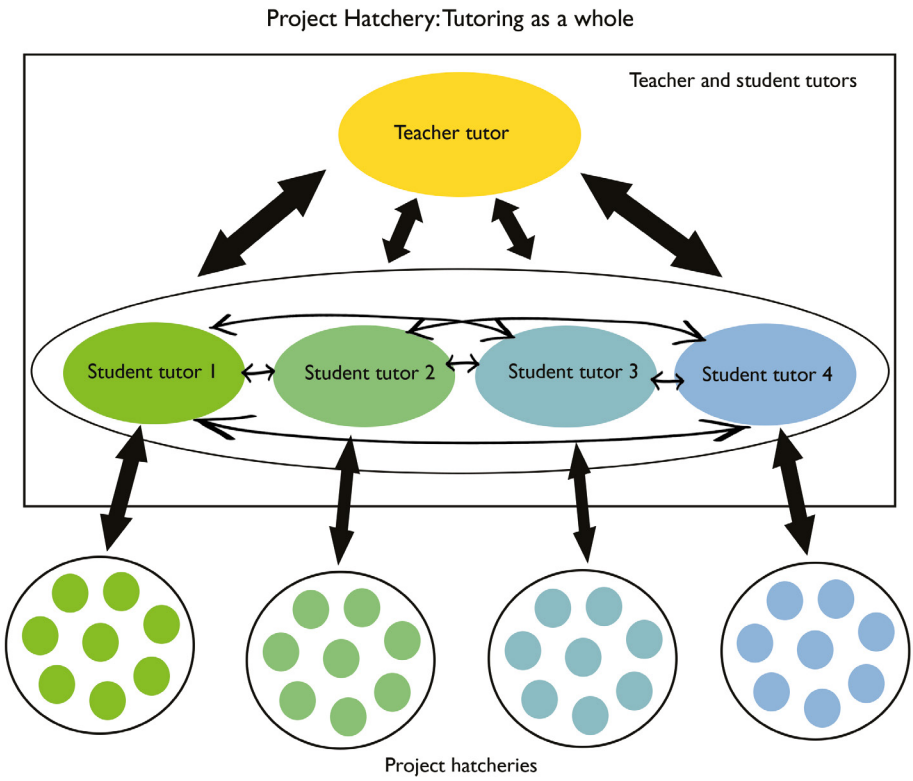

FIGURE 2. *Hatchery tutoring activities.*

3.1 THE ROLE OF THE TEACHER TUTOR

Hatchery work is characterised by a lack of advance planning. While a hatchery is provided with a topic, the hatchery itself makes its own plan on how to achieve its objective and implement the commission, with the assistance of the tutors. The lack of advance planning refers to the possibility of achieving the objective by way of a variety of solutions.

Although the teacher tutor also plays a central role in hatchery work with no advance planning, that role may not necessarily be very visible to the members of the hatchery. The majority of the teacher tutor's work has to do with preparations; in terms of actual hatchery work, however, the teacher acts as a background influence, and is therefore not too much of a presence. In the final stages of the hatchery, the teacher is engaged in processing the feedback as well as the evaluation and assessment of the hatchery work, presentations and of individual students.

The primary responsibility for the project is given to the student tutor and the members of the hatchery, while the teacher serves mainly as an observer and, when necessary, a tutor. The teacher tutor is responsible for the implementation of the project hatchery course. While the teacher tutor holds the highest decision-making power in the activities, this does not mean that he or she would dictate the hatchery's ways of working or use that power unilaterally. Rather, the teacher tutor works in cooperation with the possible commissioner and its representatives, the student tutor and the hatchery's members.

The teacher tutor initiates the project work in cooperation with the student tutors. He or she introduces the principles of project work as well as the objectives and the topic of the hatchery work. The teacher tutor inspires and spurs on the members of each hatchery, and encourages them to work independently. At the initial stages, the members of hatcheries are practically strangers to one another. For project work to get off to a good start, it is necessary to pay attention to the formation of groups within the hatcheries, for which student tutors carry the primary responsibility.

As hatchery activities progress, the teacher tutors meet at regular, agreed intervals – usually once a month – to discuss topical hatchery-related issues and support the tutor work. The teacher tutors also hold regular meetings with the student tutors to advise them on the hatchery work and to keep themselves up to date. Naturally, the teacher tutor will be in touch with the student tutors by other means, too – such as online or via e-mail – whenever necessary. To give student tutors the possibility to get immediate assistance from the teacher tutor, he or she visits the students during the hatcheries' shared work periods. The teacher tutors are also available in their offices or over the phone during the periods.

Teacher tutors always treat hatchery members equally and monitor, for example, attendance in cooperation with the student tutors. Alongside hatchery work, teachers also have the chance to instruct students on other matters related to studies.

PICTURE 6. *Meeting of project hatchery tutors (picture: Meiju Räsänen).*

3.2 WORKING WITH STUDENT TUTORS

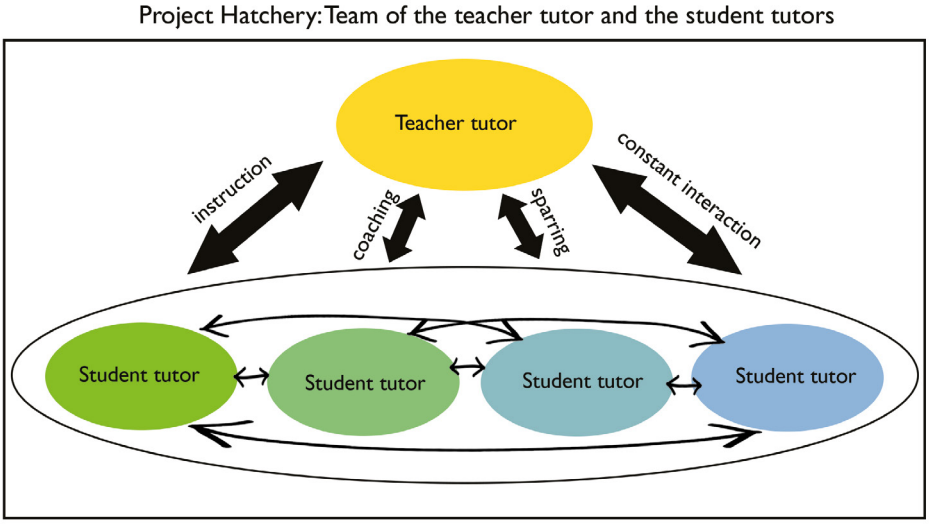

FIGURE 3. *The cooperation between a teacher tutor and the student tutors.*

The student tutors are the teacher tutor's most important co-workers in hatchery activities. Solid cooperation starts with the teacher tutor's and his or her student tutors' shared view on the hatchery's ways of working – something that needs to be ensured prior to the beginning of hatchery activities. It is advisable for student tutors to get to know not only the teacher tutors, but one another. It is advisable for the teacher himself or herself to introduce the student tutors to the materials used in the hatchery and to go through the principles of hatchery activities together (see 3.5 Guidance and support for project work). It is the teacher tutor's responsibility to make sure that student tutors follow the project's general operating principles in practice.

The student tutors come up with ideas for hatchery topics together with the teacher tutor even before the hatchery activities begin, during which time the student tutors keep in touch with the commissioners whenever necessary. The perspectives and ideas of student tutors are valuable when considering and developing various topics. The varying topics also guarantee that different hatcheries will have diverse means of implementation at their disposal. At the beginning of the hatchery, the student tutors will take part in presenting the topic or possible commission.

The student tutors play a central role in the group formation of hatcheries, a task they perform in cooperation with the teacher tutor. The goal is to get each hatchery member involved in the hatchery activities. Grouping can be achieved with the help of various games and plays (see 3.4 The hatchery group as a resource).

The student tutors monitor the hatchery members' attendance. During hatchery work, student tutors convene every Friday morning to discuss the status of the following aspects with the teacher tutor:

- what has been done during the past week,
- what will be done this Friday morning,
- what will be done during the following week.

In other words, any issues that require the advice, opinion or decision of the teacher tutor are handled on Fridays. Student tutors, together with their respective teacher tutor, supervise and monitor their own hatchery's schedules, division of labour and communications between various parties, such as the hatchery members and the commissioner.

Within their hatcheries, the student tutors serve as motivators and inspirers. Hatchery members can get in touch with them through Facebook, the intranet or via e-mail, to mention just a few examples, and not only on Friday mornings, but during other times as well. Student tutors are also familiar with the institution's methods and practices – such as how to book facilities and what the meal times are. They guide the hatchery members in various situations, especially during the initial phases of the hatchery activities, when the hatchery members are still unfamiliar with the environment. While the student tutor does not participate in the actual hatchery work, he or she can work as a mediator in any problematic situations, should hatchery members themselves be unable to resolve such situations.

During the final phases of the hatchery, the student tutor participates in processing and assessing the feedback in cooperation with the possible commissioner, the hatchery members and the teacher tutor. The assessment is introduced in more detail under section 3.7 (Reporting and assessment of hatchery activities).

3.3 WORKING WITH THE COMMISSIONER

Project hatchery work is based on hatchery topics, provided by the commissioners. Commissioners include companies, various kinds of organisations and associations, or commissioners from within the university of applied sciences, such as degree programmes. The search for new hatchery topics and commissioners requires the activeness of both students and the student tutors. All contacts that tutors have with business parties and the business world in general provide valuable sources of topics. The same applies to tutors' hobbies and recreational activities or their neighbourhoods, for example.

Regardless of the topic, it is advisable to follow shared procedures in hatchery work even when operating with commissioners. These procedures concern the introduction of hatchery activities, the determination and presentation of topics (for more on the content of topics, please turn to page 15, Hatchery topics and commissioners), communication with commissioners and the commissioners' participation in meetings, assessments and feedback discussions.

Teacher tutors should explain the principles of project hatchery activities to commissioners. This will provide commissioners with a clear picture of the kind of activity involved. The most important details to be recounted to commissioners include:

- the general objectives of hatchery work,
- the activities of tutors,
- the schedules for hatchery meetings,
- communications within the project,
- the size and composition of hatchery groups,
- poster preparation,
- drawing up the final presentation,
- assessment of hatchery work,
- the provision of feedback.

Among other things, the commissioner should understand not to give too detailed instructions or expectations as to the project's outcome. Rather, the idea is that the hatchery itself finds out how to go about implementing the commission. Likewise, the commissioner will be clear on how and when it can contact the group or how the group contacts the commissioner, of the principles applied to the design of the poster and of how the assessment and the giving/receiving of feedback and its processing has been arranged.

Once hatchery work has begun, the hatchery should remain in touch with the commissioner often enough to give the commissioner a chance to monitor the work's progress. When the hatchery topic so requires, the commissioner should be invited to join the hatchery meetings. It is often necessary for the project manager, for example, to meet the commissioner on a regular basis. The hatchery is primarily responsible for providing the commissioner with regular updates on the project, but the teacher tutor can also contact the commissioner during the hatchery, according to his or her discretion.

Commissions often include the production of various materials, such as brochures, web pages or videos. Sometimes the commissioner may wish to receive a separate final report on the project. When drawing up such reports, one should be particularly careful to follow the commissioner's instructions on how to use company logos, for instance, or on how to publish/distribute company-related information. Likewise, the commissioner may express its wishes on what the poster should be like. Such wishes should be taken into consideration especially in situations where the commissioner plans to use the poster later in connection with, for example, its own marketing activities.

The commissioner should be given an opportunity to give feedback and to participate in the assessment concerning hatchery members. In the final stages of the project, the commissioner is invited to a joint meeting in which the commissioner can give a general overview of what the hatchery has done in various situations or how cooperation with, for instance, the project manager progressed. This will also provide hatchery members with a final opportunity to meet the commissioner and discuss hatchery activities and the commission they have carried out with the commissioner. It is important, at this point, to jointly think about both successes and aspects that need further development. The commissioner does not, however, usually participate in the evaluation involving the actual assessment forms.

3.4 THE HATCHERY GROUP AS A RESOURCE

PICTURE 10. *The first stages of group formation (picture: TUAS).*

Grouping constitutes an essential element of the project's commencement and is something that the teacher tutor and student tutor do together with the group. The purpose of grouping is for students and tutors to get to know one another, to discover the traits, strengths and competence of group members and to draw up rules for the work. To achieve good grouping, it would be beneficial for tutors to be aware of typical group behaviour. Group activities are usually characterised by the following five development phases: forming, storming, norming, performing and adjourning. (See Tuckman and Jensen 1977.)

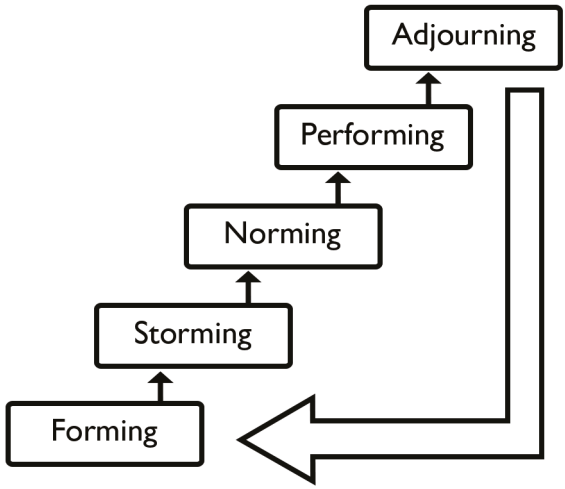

FIGURE 4. *The stages of group formation according to Tuckman and Jensen (1977).*

In reality, the five development phases presented by Tuckman overlap according to the group's operation and duration. The project hatcheries last for the autumn term, during which time the groups go through these five phases. It is typical of the forming phase for students to have some kind of a preconception of the hatchery work, but these conceptions can often be vague and contradictory. Questioning and uncertainty are indeed characteristic of groups in this phase, given that the hatchery's topic, activities, objectives, etc., are only just becoming clear to the hatchery members. At this point, hatchery students do not usually know one another or the hatchery's tutors. Expectations concerning the hatchery work, the tutors and other students may vary to a great degree between different hatchery members. The group's first joint meeting therefore plays a crucial role in the forming and for the creation of a good work environment. The tutors are still in a central role in terms of bringing about solid hatchery activities.

Concrete tools that will prove helpful in the group formation include group-specific folders on the intranet containing information about the members, Facebook's group functions, e-mail, and so on. The furnishings and table placement of the project work facilities, such as a classroom, can contribute to group formation. Various means such as interviews and games can also be put to use in connection with a meeting. The goal is for the project work to progress as smoothly as possible once the group has formed. The main

responsibility for group formation and the students getting to know one another lies with the student tutor. Depending on the student tutor's choice, he or she can use very different methods indeed for the grouping. Guidance on how to implement various methods can be found in, for example, the publication *Towards Active and Working Life Orientated Learning* available at http://julkaisut.turkuamk.fi/isbn9789522165121.pdf.

At the initial phase, group members gauge each other's expectations and qualities. Gradually, they will begin to come up with operating methods, whereby group members also start to assume roles within the group. Project hatchery roles include that of project manager, secretary and the person in charge of the poster. The roles are explored in more detail in the Guide for student tutors (Appendix 2).

Once the group members have gotten to know one another and the actual hatchery work begins, what usually follows – even in the context of a hatchery group – is the crisis, or storming, phase. At this point, hatchery members may challenge one another or the commissioner's topic as well as its handling and implementation. It is also possible for the student tutor and teacher tutor to come under criticism. The storming phase is nevertheless a natural part of group dynamics, not to mention an important part of them, since constructive discussion and scrutiny allow the group to form a basis for its own ground rules and roles, in addition to, for example, the formation of smaller groups within the hatchery. What should be avoided, however, are situations where smaller groups within the hatchery become too permanent and perhaps unable to work with other hatchery members. It is equally important to ensure that none of the students drop out of the hatchery during the storming phase. This is why the student tutor should keep a close eye on the situation in this phase and, if necessary, guide the hesitant student to continue his or her work in the hatchery with the help of the teacher tutor.

During the storming phase, a skillful tutor encourages hatchery members to deal with even the most critical issues so as to allow work to continue. Along these lines, the tutor must also be prepared to face a variety of emotions. It is possible that hatchery members suddenly start to seem lazy or uninspired or that they direct an enormous amount of enthusiasm to something that is entirely secondary with regard to the hatchery's objectives. While all this a part of the storming phase, it is a useful skill to understand how long this phase may be allowed to last. Even the storming must come to an end and conflicts

be resolved for the situation to even out. Shared ground rules will also help the group to overcome conflicts. Such ground rules are usually agreed on after the storming phase, at the latest.

Hatchery groups draw up their own ground rules partly on the basis of the course's implementation plan and partly according to the group's own topic and needs. The rules relate to, among other things, the obligation to participate and on how to make up for absences, communication between the members and other practical matters. This is a good point for the student and teacher tutor to remind the students of the course's general objectives and principles. Jointly agreed and accepted rules may include something along these lines:

- Remember to read Facebook messages often enough.
- Update your own folder in Optima every Friday.
- Inform the project manager of any unavoidable absences.
- Be punctual, don't be late.
- Give other people a chance to say what they have to say, don't interrupt.
- Hold your tongue – no expletives.
- Encourage others in problematic situations.
- Work according to the agreed schedule.

PICTURE 7. *A group drawing up ground rules together (picture: Meiju Räsänen).*

Performing is the most productive phase in a group's activity. With its ground rules and other preliminary activities, the hatchery group has created the basis for some real action. Depending on the commission, hatchery members work in various smaller groups, change the composition of such groups when necessary and work in cooperation with any other parties whose involvement the commission requires. The networking continues and the work enters its active phase. It may also turn out that things need to be done in a variety of ways, on the basis of trial and error, for finding the best possible means by which to achieve the objective. While the desired objective is not always attained, hatchery members nevertheless strive to reach a common goal through their activities. The outcome is the end result of the cooperation between the students participating in the project. In concrete terms, all hatcheries, in this phase, in addition to completing the tasks of their own commission, draw up the hatchery presentation concerning their own hatchery, the poster and the hatchery report.

Active performing is followed by the adjournment (conclusion) of the hatchery work. Before this, the hatcheries have submitted their posters for the general presentation and assessment, presented the results of their work in shared presentation sessions, submitted their final reports for assessment and carried out other hatchery-specific tasks related to the conclusion of hatchery work. What remains prior to the closing down of all activities is a summary of the assessments and feedback discussions. The work's commissioner often also participates in the assessment and feedback discussions. These are discussed in more detail under section 3.7 (Reporting and assessment of hatchery activities).

PICTURE 8. *Hatchery topic: a company's market study (made by: Veera Yli-Saari).*

3.5 GUIDANCE AND SUPPORT FOR PROJECT WORK

The hatchery's topic forms the core of the project work, and successful group formation contributes to the performance of that work. However, project work also requires general work instructions to be given to hatchery members. The project's commencement requires the hatchery members to be introduced to the basics of project work, the hatchery's objectives, schedules, assessment and other common practices (see Appendix 2. Guide for student tutors).

Prior to the project's commencement, the teacher tutor creates a workspace for the group on the intranet. Student tutors also possess limited editing rights for the workspace. The hatchery's members and other project parties, such as the possible commissioner, may have the right to use and read certain files.

The teacher tutor and student tutor introduce the topic when the hatchery begins and give it to the group for processing. The commissioner or someone else with expertise on the topic may also take part in the topic's introduction to hatchery members. Following the topic's presentation and introduction, the hatchery group organises by selecting for itself a project manager and secretary/note-taker as well as a deputy project manager and secretary. The project may also require someone to take charge of communications/contact person as well as people responsible for the project plan and the poster or marketing, for example. The roles are determined according to the needs and topic of each hatchery (see Appendix 2. Guide for student tutors).

The teacher tutor can introduce the basics of project work with, for example, the help of the following diagram.

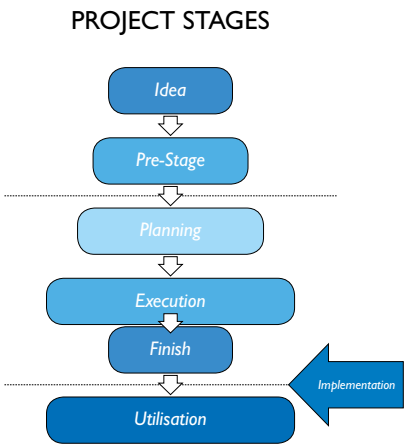

FIGURE 5. *The progress of project work according to Marjukka Lulli-Seppälä (2009).*

The process begins from the topic's idea, which matures during what is referred to as the preliminary phase, at which time the hatchery group studies the topic, obtains further information and is assisted by the commissioner. The development of the idea and the topic continues throughout the planning phase, during which time hatchery members also consider the

implementation options offered by the topic, the topic's limitations and practical arrangements. As early as during the planning phase, it is important for each hatchery member to have something to do and to commit to the work from the very beginning.

Timewise, the implementation is the lengthiest period, during which the group works according to the principles it has agreed. The adjourning phase includes the hatchery presentation, feedback and assessment, as well as the final essay (see sections 3.6 and 3.7). The achieved results are often taken into use only after the project has finished.

The project plan is a crucial document in terms of the project's progress. So far, our hatcheries have employed an indicative project plan, based on which each hatchery has drawn up their own version.

The plan includes the parts listed in the table of contents below:

1 PROJECT CONTENT

1.1 Background

1.2 Target

1.3 Objectives

1.4 Delivery schedule

2 ORGANISATION

2.1 Project organisation

3 BUDGET (case-specifically)

4 PROJECT IMPLEMENTATION

4.1 Learning journal

5 REPORTING AND COMMUNICATION

5.1 Meetings

5.1.1 Project reviews

5.2 External and internal reporting

5.3 External and internal communications

6 RISK ASSESSMENT

6.1 External risks

6.2 Internal risks

7 PROJECT FINISH

PICTURE 9. *Different phases of project work (picture: Martti Komulainen).*

3.6 WEEKLY PROJECT MEETINGS

The schedules and the content of activities are determined according to the project plan. For the most part, hatchery groups convene every Friday, but perform organised work during other times, too. While the groups usually convene in their respective premises at the institution, some of the Friday meetings may also consist of fact-finding trips or visits, depending on the project's nature and the group's own plan. The hatchery's members may also work in different locations within the institution's premises or someplace else, provided that this has been agreed on.

The group meetings held on Fridays chiefly consist of each hatchery's own work under the project manager's lead:

- convening and establishing attendance,
- progress report, under the leadership of the project manager,
- agreeing on the day's tasks,

- working,
- a summary of the day's tasks under the project manager's leadership,
- agreeing on the task's of the following week under the leadership of the project manager.

The Friday meetings can include visits by specialists, meetings with the commissioner or other parties, and progress reports according to the project plan's schedule. The planning and implementation of the poster is likewise a part of Friday activities. The secretary/note-taker is tasked with writing a memorandum on all Friday meetings. The memos are saved on the intranet, where they can be read by all group members.

Progress report

Hatchery groups are advised to check whether the work is progressing according to the project plan during the course of the project. This allows for discovering any possible deviations from the original plan and performing the necessary remedial measures on time. The review can be performed, for example, during the project's mid-phase, but also earlier and more than once, if necessary. The report answers the following review questions concerning the project. The answers are reported in the way agreed to by the group so that they are available to all parties.

> **Where are we?** What has been done so far?
> **Where should we have been ?** What should we have achieved so far, according to schedule in the project plan?
> **Where are we going?** An estimate on whether the project will be realised according to plan.
> **Grounds for where we are.**
> **Measures. What's the next step?** (Marjukka Lulli-Seppälä, 2009)

The review is performed on three axes: content, time and resources. The timetable review is an essential point, related to a comparison to the division and schedule drawn up during the planning phase. The report should mention what has been achieved so far. This output is then compared to the project plan.

Section 4 includes the grounds for the results of the review performed under sections one and two. The grounds can be both internal (dependent on the group itself) and external (caused by factors independent of the group).

The resource review refers, in particular, to a review and clarification of the hatchery members' use of personal time resources. By personal time resources we mean the time resource reserved for the project hatchery's work (81 hours per person). The progress report also takes into account the time resource's adequacy with regard to the work that remains to be done. The review of financial resources can be left out of the report, provided that it has no significance for the project work; usually, the projects do not need a financial resource. Finally, the report should mention how the group plans to continue the project after the review.

The project manager directs the hatchery work. He or she keeps in touch with the commissioners and other parties, divides and supervises work within the group, asks the student tutor for advice and makes sure that the project progresses according to plan.

The student tutor and the teacher tutor are either present or available and keep their own appointments (see 3.2 Working with student tutors). Student tutors can also convene for talks amongst themselves. The teacher tutor ensures that the hatchery group is provided with the assistance and information it needs during the performance phase. At regular intervals, the group is also provided with information sessions for the purpose of discussing, for example, and depending on the group's needs, the following:

- the project manager's activities,
- the secretary's activities and the preparation of memos,
- the making of the poster,
- the preparation and presentation of the final report,
- the preparation of the final essay,
- giving and assessing feedback.

The information sessions can be held by the teacher tutor or some other expert. The information sessions are also documented and posted on the intranet.

The poster

Students are provided with general instructions on how to make the poster. The instructions relate to both technical and scheduling requirements. Poster implementation must also account for any possible wishes and requirements expressed by the commissioner. Finished posters are put on display in the institution's premises. During the display, the institution's staff and students have the opportunity to vote on which two posters they consider to be the best. The poster that wins the entire vote is awarded.

PICTURE 10. *Hatchery topic: planning a recreational day ("Kylläpä virkisti" = "That sure was refreshing", made by: Jaakko Laakkonen).*

PICTURE 11. *The Reeds (Ruovikko) poster (made by: Marianne Hakala & Jaakko Hietala).*

Final presentation

Each hatchery group drafts a presentation on its hatchery according to instructions given in the information sessions, but with the help of means the group itself is at liberty to decide. The length of the presentations is limited to a maximum of 15 minutes. The groups plan their presentation and practise its performance under the guidance of the student tutor. Each group is expected to practise its presentation's performance, to be able to estimate its length and ensure that the technology employed works. The teacher tutor should see the presentation approximately a week before the presentation day, so as to have a chance to provide the presenters with guidance.

All members of the hatchery should be present during the presentation. A detailed schedule on the presentations of project hatcheries, which includes the participation schedule of project hatchery tutors and student tutors taking part in the assessment, is drawn up for the purposes of the final presentation. Tutors may not assess or evaluate their own hatcheries. The schedule that is drawn up is followed "to a tee". Given that the maximum length of a

presentation has been set at 15 minutes, the presentation is interrupted in mid-phrase if need be. The number of presentations, of which there are a great many, influences the precise observation of the schedule. The presentation facilities and the order in which the presentations are given are drawn by lots.

The presentations are evaluated according to jointly prepared criteria based on the implementation plan (Appendix 3). The evaluation is described in more detail in the following sub-section. Hatchery members should be made aware of the evaluation criteria well in advance of the presentation. Timing the point at which this information is given allows the hatcheries to begin preparing their presentations at roughly the same time. Student tutors may not participate in the presentation or its preparation; they can only advise the hatchery members.

Based on the evaluations, a predetermined number of the presentations is admitted into the finals. The groups responsible for these presentations then get yet another chance to hone their presentations before the finals, based on which a winner is selected after new evaluations.

3.7 REPORTING AND ASSESSMENT OF HATCHERY ACTIVITIES

Students document their activities on a voluntary basis, by recording their working hours and the content of that work in an informal journal. All students are required to write two personal reports related to the work and learning. The student tutor will also draw up a final report on his or her own activities. This report may be free in form. In addition to the project plan drawn up at the beginning of the project, each hatchery group prepares a hatchery report once the project comes to an end. Group members will furthermore carry out self-evaluations and peer assessments and conduct a joint feedback discussion during the entire group's final meetings.

Journals and personal reports

The keeping of journals is optional, but advisable. The journals allow each hatchery member to document the hours they accrue and to keep a record of what they have done in the hatchery. At the same time, the student gets

a chance to compare his or her own contribution to that of other hatchery members and to take on tasks and assignments according to the amount of available hours.

The purpose of the personal reports (see Appendix 4) is to support students' learning and make them think about:

- their motivation within the context of hatchery work,
- their role and grouping,
- the development of their innovation skills,
- their learning,
- their networking,
- the project's progress,
- the division of labour within the hatchery,
- the handling of any possible problems.

Personal reports are used in connection with assessments concerning individual students. The student tutor's report is an informal report in which the student describes his or her activities and experiences as a hatchery tutor. The report may raise the student's grade.

The hatchery report as a final report

A final report is usually an essential element of project work. In project hatcheries, the equivalent of a final report is the hatchery report, which is drawn up to give the students one more opportunity to think about the progress, results and assessment of their own project. While students are provided with general instructions on how to draw up the hatchery report, they can compose the report very innovatively and use various forms of expression. The report's content must be produced and approved by the entire group and not just by the project manager, for example. The report is posted on the intranet and submitted to the person responsible for hatchery operations in the institution, who approves it. When necessary, this person may ask a group to specify or supplement its report. The hatchery report is also used when considering the hatchery's joint grade.

INSTRUCTIONS FOR THE FINAL ESSAY

This year, we are replacing the hatchery report with an essay. It is therefore advisable for each hatchery to maintain a journal/take notes and/or photographs, etc., on the hatchery's activities and the project's progress throughout the autumn. When the hatchery nears its end, the members will use the aforementioned material to write an essay/account/narrative about their project (any possible illustrations or photos included). This kind of final assignment will allow hatchery members to freely use their innovation skills. It also helps to avoid situations where too precise rules restrain creativity.

Should the beginning nonetheless prove difficult, students are provided with the following tips:

OUR PROJECT, i.e. come up with an interesting name!
What was done?
What was a success?
What may have gone awry?
Possible blunders
Comments from hatchery members
What was learned?
etc.

The best/most interesting essays (about eight of them) will be printed in a publication of Turku University of Applied Sciences. After a preliminary round of eliminations, four evaluators will select the best three essays out of the ten most interesting ones. The authors of these three essays will be awarded early next year.

Although the essay will be evaluated as part of the hatchery performance, authors need not sugarcoat issues or "improve" upon the project's success. The essays should not mention anyone by name or, naturally, hurt anyone's feelings. In other words, the idea is to get well written essays and accounts!

Students frequently ask the question: "How long should it be?". The answer to this is: "Three to six pages".

The essay should be returned to one's own student tutor by 11 December.

Guiding and instructive assessment as a starting point

PICTURE 12. *Students in a feedback discussion (picture: Meiju Räsänen).*

Assessment and evaluation form a continuous and fixed element of the entire Project hatchery course from the start to the finish. Students are evaluated with grades on a scale of 1–5. However, rather than providing a mere numerical grade, the assessment's purpose is, above all, to function as guiding and instructive feedback to the student, i.e. what is referred to as a qualitative assessment.

The aspects evaluated in the context of a project hatchery include:

- the ability to look for information independently and to use information,
- working in a multidisciplinary group,

- knowledge of various degree programmes and the students who study them,
- networking,
- project work skills,
- presentation and interaction skills,
- innovation skills.

Grading is assisted with skill descriptions for the grades 'satisfactory' (1 and 2) and 'excellent' (5). While there is no verbal description for the grade 'good' (3 and 4), it is placed between the two descriptions mentioned above. Recurring lateness, more than three absences, the excessively late submission of reports or a neglect of hatchery activities can lead to a failing grade. In problem situations, the student and teacher tutor must have a talk with the student in a sufficiently serious spirit.

EXCELLENT 5

Contributes to the group's learning through his or her own active efforts

Learns new independent working skills and is able to identify competencies within the group

Demonstrates his or her assimilation of innovative skills

Has the ability to actively create cooperation networks on various levels

Learns and develops new project work skills

Uses his or her presentation and interaction skills in versatile ways during the project

Actively participates in interaction situations (discussions during classes and outside school, on Facebook and the intranet, for example)

The student's motivation is excellent

The observation of schedules is excellent

GOOD 3 and 4

SATISFACTORY 1 and 2

Wilful/unwilful absences

Participates in the group's work to some extent in group situations (project hatchery hours + other work performed together)

Performs tasks and assignments given to him or her fairly well

Is able to use the multidisciplinarity/different resources available in hatchery work to some extent

Demonstrates an effort to achieve innovative solutions

Creates some new networks (cf. networking chart, student's journal)

Reasonable participation in interaction situations (discussions during classes and outside school, on Facebook and the intranet, for example)

Satisfactory observation of schedules

The student's motivation leaves room for improvement

Lateness

It is worthwhile to go through the hatchery's objectives, the aspects that will be evaluated and the means of assessment and evaluation together with the students during the very first meetings. It is also advisable to revert to the aspects under evaluation from time to time during the course work, not just when the hatchery is drawing to a close. This allows for better support of the student's development, given that the evaluation guides and reminds students of the desired learning objectives.

The evaluation may rely on the student's self-evaluation, the peer assessment of other hatchery members and the tutor's evaluation (see Appendices 5, 6 and 7). In addition to a self-evaluation and peer assessment, the students will give themselves and their peers an overall grade on the project hatchery work, reflecting the grade against the evaluation targets. When they wish to do so, students may also give verbal feedback. The student tutor will also employ the same evaluation tool when assessing the members of his or her hatchery.

Finally, the student tutor will summarise the assessments and present the summary to the teacher tutor. The teacher tutor and student tutor will then discuss the assessments and the summary. The student tutor gives every student a justified proposal on the grade. The hatchery's students may also

take part in the assessment discussion. The student tutor's point of view is important, because he or she knows the hatchery's students and has seen them at work more frequently than the teacher tutor.

One of the aspects assessed within a project hatchery is innovation competence. The advancement of students' competencies is measured with an assessment tool developed for the purpose. At the beginning of a hatchery, each student performs a self-evaluation the purpose of which is to guide the student to direct and develop his or her own activities and competencies during the hatchery work. This self-evaluation is returned to no later than when the hatchery ends, at which point the students perform the evaluation again. The students use the same assessment tool to perform evaluations on the members of their own group or sub-group at the end of hatchery work. The assessment tool is meant to serve as a tool for the student's self development with which the student can perceive his or her own strengths and development targets. On the other hand, it can be used to enhance the ability of institutions of higher education to measure the development of skills that are crucial in terms of working life and thus contribute to the birth of the skills necessary to create new innovations. Furthermore, the assessment tool enables a more precise verification of the effectiveness of pedagogic methods with regard to the teaching of innovation skills. Further information on the assessment tool and the evaluation of activities is available in the handbook *Innovaatiokompetensseja mittaamassa – opas innovaatiovalmiuksien arviointiin* (Measuring innovation competencies – a handbook for the assessment of innovations skills).

The project hatchery as a working method allows for providing students with more personal feedback than in the context of traditional lecture-based studying. Students naturally receive feedback throughout the course from both the teacher and student tutor, their peers and their commissioner. In addition to continuous feedback, it is important to arrange a shared feedback discussion session at the end of the hatchery in which everyone gives and receives verbal feedback on their turn. The feedback discussion can be led by the teacher tutor and student tutor together or by the student tutor alone. The informal shared feedback discussion can also include the commissioner or other parties involved in the project. The topics of the feedback discussion can be thought out in advance by the teacher and student tutors or within the group. Feedback discussions can also be conducted on the basis of the assessment forms. The essential aspect is to give and receive feedback on successes as well as on any things that are in need of development.

While the target of feedback may vary, the central issues to consider may include:

- what I learned;
- what was difficult;
- what was easy;
- what was new;
- which procedures would I want to improve;
- how can I use my experiences in the project later;
- what was I successful in and why;
- if I failed in something, what was it and why;
- to what extent was the commissioner's objective achieved.

It is worth keeping in mind some general instructions on how to give feedback, whether the feedback is given in the context of work or in the actual feedback session.

The better the feedback is in supporting the receiver's self-acceptance, helping him or her to solve problems independently instead of seeming like a judgment, the more effective and easier to process it is.

- Growth takes place on the basis of positive aspects. "If I'm told that I'm good at something, I'd be happy to do it." Positive feedback improves self-esteem and increases hope. An awareness of one's strengths will also help the individual to deal with painful and difficult issues in the future.
- Giving feedback is a conscious act, not an uncontrollable outburst (prepare). Feedback can be given in the form of a "feedback hamburger", in which case the negative feedback is "sandwiched" between the positive feedback. Starting off with positive feedback makes the person receiving it more open towards the process, while the reverse approach may result in rejection. It is important that what is "ringing" in the ears of the person receiving the feedback in

the end are the positive words, so that he or she, despite everything, feels appreciated and trusted, in terms of being able to change the aspects that came under criticism.

- Direct the feedback at issues, not the person. Describe concrete observations whilst avoiding interpretation, appraisal and arriving at conclusions. Rather than telling someone outright that they are dominant, it is may be more fruitful to express the matter along the lines of: "Just now, when we were making a decision, you interrupted another person three times, and started to express your own views on the matter." And rather than telling someone that they present things well, it may be better to say something like "Your slideshows are clear and easy to read. You didn't need your notes, but expressed yourself freely."

- Use first person ("I") messages and link your emotions to needs. Say "I was annoyed that you kept interrupting me, because I'd like to have my say without being interrupted" rather than "You're a bad listener." And: "I enjoyed your presentation because you illustrated it with personal experiences." Tell the person how the event influences the following work phases, for example. Focus on a particular situation and be careful not to generalise. In other words, say "Just now you did this" rather than "You always do this."

- Only give feedback on matters that the receiver has control over. Time the feedback accurately, preferably right after the event in question. Give feedback only on your own account and be clear on the fact that what you are saying represents only your view – i.e. "I think" rather than "we all think".

- Tell the person receiving the feedback how you wish they would operate and state your request so precisely, that he or she knows exactly how you wish they would operate. In other words, not this way: "You could pay more attention to your listeners", but this way: "You kept glancing/looking out the window just now, while you were talking". Pay attention to eye contact, so that your listeners feel that you are talking to them." Or: "Your questions were successful in engaging the audience. Keep that up in the future."

Feedback is also important for the student tutor. In addition to continuous discussions that are open and instructive discussions, teacher tutors will benefit from holding feedback discussions both within their respective teams and personally, with each individual student tutor.

FURTHER READING AND REFERENCES

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APPENDICES

APPENDIX 1. GENERAL INSTRUCTIONS CONCERNING PROJECT HATCHERIES

Turku University of Applied Sciences
Faculty of Technology, Environment and Business
PROJECT HATCHERY, autumn 2013
The background is made up of the hatchery's shared objectives:

The student

- Gains experience in collaborative learning.
- Learns additional independent working skills.
- Learns to work in a multidisciplinary group within his or her faculty and gets to know students from various degree programmes.
- Develops his or her innovation skills (individual, community and network level).
- Begins to create the networks necessary in working life and studying.
- Increases his or her skills in project work.
- Adds to his or her presentation and interaction skills.

• Marjo Kumpula will draw up five implementation plans that will be available in SOLE, group ID (NMYYNS13).

	NMYYNS13	7000180	Project Hatchery	Hatcheries 1-9
	NMYYNS13	7000180	Project Hatchery	Hatcheries 10-18
	NMYYNS13	7000180	Project Hatchery	Hatcheries 19-27
	NMYYNS13	7000180	Project Hatchery	Hatcheries 28-36
	NMYYNS13	7000180	Project Hatchery	Hatcheries 37-

In other words, the other degree programmes will not participate in the implementation at all. At the end of the hatchery, each hatchery tutor will enter the grade in Winha, under the correct implementation. The hatchery tutor will urge/monitor that the student signs up for the correct implementation through Sole in early autumn.

- Project hatcheries will be held on Friday, 30 August 2013, for c. 5 hours at different times. In other words, the teacher tutor will meet each of his or her three hatcheries at a different time of the day. It is absolutely necessary for the student tutor to be present and to run the hatchery alone for a part of the day (with regard to forming groups, for example). Marjo will distribute the schedule in the spring.

- The teacher tutor will invite all of his or her student tutors to a meeting in August, to agree on their respective shares. It may be beneficial to get in touch preliminarily as early as in May.

- Project hatcheries are mandatory for all students. The students will accumulate a total of 3 credits for the hatchery (i.e. it involves 81 hours of work). Since the required hours cannot be achieved on Fridays alone, the students should also have something else to do. Of course, the rest of the required hours can also take the form of various written assignments.

- The faculty's exchange students are also welcome to join the hatcheries. The most important hatchery documents meant for students are also available in English. Exchange students will be placed in pairs, at the very least, the point being that none of the hatcheries include only a single exchange student.

- Hatchery work takes place in multidisciplinary student groups. Each teacher is responsible for three hatcheries. In each hatchery, he or she is assisted by one student tutor. Every hatchery is composed of 12–15 students. In the autumn of 2013 we also tried a model where a few of the previous year's student tutors assumed the "teacher's role" as the leader of three hatcheries (with student tutors). Marjo Kumpula offered support for these hatcheries whenever necessary and recorded the grades, for example.

- For their contributions and work, the student tutors receive 3 credits (under the name ”project hatchery student” 3101040 in Winha), in addition to a student assistant's salary and a “reference”. This is a way of securing their commitment to the work.

- Marjo Kumpula forms the multidisciplinary hatchery groups in August, once the name lists concerning new students are ready. The name lists are posted on the window of the downstairs lobby hatchery-specifically (with only the hatchery number, not its topic, visible).

- The teacher tutors inform Marjo Kumpula of the topics of their respective hatcheries once these have been confirmed, but no later than on 13 September. This will provide us with an overall picture of the hatchery topics underway and reveal possible opportunities for cooperation.

- Hatchery work begins on Friday, 30 August, and continues throughout the autumn term on Friday mornings, from 9:15 a.m. to 11:30 a.m. Students can enter 3 hours for every Friday session attended in their journals.

- Participation in the hatchery party is worth 4 hours.

- One session can be made up for with inter-hatchery networking, a cruise, or the like. 4 hours

- The teacher tutor visits the hatcheries every Friday, but does not need to be present for the whole time: it is enough for him or her to be present in the office (or available over the phone).

- Project groups should have something meaningful to do at all times, so that students are not tempted to think of something else to do.

- The teacher and student tutor must make an effort to secure every student's commitment to the project and to get the project back on track if the group seems to running out of steam. Naturally, the students should also monitor themselves and agree on ground rules to ensure that everyone participates in the work actively.

- The hatchery may post the ground rules on the classroom wall, for example.

- Each Friday, the hatchery will begin by holding a meeting/review of what has been done and what will be done next.

- The student tutor of each hatchery delivers the project plan he or she has checked and approved to Marjo Kumpula by 30 September. Hatcheries are provided with a ready template (but they are also free to use other models, should they wish to do so).

- The students in all hatcheries must monitor their hours personally, with the help of a form drawn up for the purpose (Excel). In addition, the students fill in personal reports that are returned to the student tutor (twice). The student tutors will deliver these mid-term reports to the teacher tutor. The same applies to the final reports and records of the students' hours at the end of the hatchery. Students must also fill in the ICB form. The hatchery tutor himself or herself will inform the students of any other reporting, etc., requirements.

- Attendance is mandatory. Any absences must be made up for by, for instance, book synopses or additional work. The nature of any additional work will be decided within the hatcheries. Hatchery work cannot be made up for with a doctor's certificate. **The fourth absence will result in a failure.** In such cases, the student in question must complete the hatchery course the next year. (Those joining hatcheries after they return from military service can do so, provided that they complete the additional work assigned to them. However, once they have joined a hatchery, they cannot have any more absences.)

- The teacher tutor will enter the grades for the hatcheries in Winha during December. If a student fails the hatchery course, he or she must retake the course the following year.

- Each hatchery will prepare one poster on their respective hatchery topic. The poster material should be ready for submission on 2 November. The hatchery members themselves will then post the printed poster that arrives from the printing shop in hallway B2 at Sepänkatu. The poster's size in the A series is 70 x 100 cm. The hatchery that wins the electronic vote is awarded. Further information about the posters will be given at a later date. Voters

must vote for two posters, one of which can be their own hatchery's poster.

- Each hatchery will present its project according to the hatcheries' numerical order on 22 November. The presentation should take 10–15 minutes. It is prepared in accordance with the NABC approach. The presentations are given simultaneously in three halls (Monitori, B20, B22) and will be evaluated by the hatcheries' teacher and student tutors. The hatchery presentations will take up the entire day. There are no breaks between presentations, which will be given after one another. **The audience will also include all hatchery members, who will be there to listen to their own presentations.** It is advisable for student tutors (and teacher tutors, too) to see the presentation in advance and give feedback.

- Of the project presentations given in each hall, the two which receive the most votes are entered into the finals that will be held on **29 November (from 9 a.m. to 12 noon)**. The panel is composed of the student and teacher tutors. The panel members may not vote for their own hatchery. The three best hatcheries in the finals will be awarded. The winning team will be awarded with, for example, glow bowling and a meal/dinner, etc., (in March) and 1 credit.

The aspects to be evaluated in the voting are:

- the clarity of the project hatchery's topic and assignment
- the presentation's logic
- illustration/demonstration
- means of expression
- the rapport established with the audience
- the presentation's ability to convey the entire group's contribution to the project

• Each hatchery draws up a final report for Marjo Kumpula by 11 December. The report in question is submitted by the student tutor. The report is drawn up on the basis of the template provided.

• Information sessions are held throughout the autumn for those responsible for posters, project managers, student tutors and those responsible for the presentations, etc.

• Course assessment

The course is evaluated normally, on a scale of 0–5. The nature of hatchery work also entails the project group and student tutor taking part in the assessment (in terms of those who fail to pass the hatchery course, for example). Four absences will result in a failure.

• Student tutor's assessment (0–5) Performed by Marjo Kumpula collectively by hearing the hatchery members and the teacher tutor. The project manager collects the hatchery members' feedback on the activities of the student tutor, calculates the average and sends it via e-mail to marjo.kumpula@turkuamk.fi (hardcopy forms are also delivered to Marjo Kumpula).

ASSESSMENT CRITERIA

- Capacity for cooperation
- Keeps his or her promises
- Schedule observation
- Enthusiasm
- Clarifying matters, information searches
- Presentation skills
    - (oral, composition, visual)

EXCELLENT

- Contributes to the group's learning with his or her own active efforts.

- Learns new independent working skills and is able to identify competencies and skills within the group.

- Demonstrates an assimilation of innovative skills.

- Has the ability to actively create cooperation networks at various levels.

- Learns and develops new project working skills.

- Uses his or her presentation and interaction skills in versatile ways during the project.

- Actively participates in interaction situations (discussions in the classroom and outside of school, on Facebook and Optima, for example).

- Has excellent motivation.

- Excellent observation of schedules and timetables.

GOOD

-

SATISFACTORY

- Wilful/unwilful absences.

- Participates in the group's work to some extent during group situations (project hatchery hours and other jointly performed work).

- Performs the tasks and assignments given to him or her fairly well.

- Has the ability to use multidisciplinarity/various resources to some extent in the context of hatchery work.

- Demonstrates an attempt to come up with innovative solutions.

- Creates some new networks (cf. the network chart, the student's learning journal).

- Fair participation in interaction situations (discussions in the classroom and outside the school, on Facebook and Optima, for example).

- Fair observation of schedules and timetables.

- Motivation needs improvement.

- Lateness.

APPENDIX 2. GUIDE FOR STUDENT TUTORS

Guide for the student tutors of project hatcheries
2014
Konsta Koivunen & Mika Sillanpää
Turku University of Applied Sciences
Technology, Environment and Business

Rules concerning the course

The project hatchery is a study unit/course worth three credits, which translates into roughly 81 hours of student work. The planning and implementation of hatchery assignments should aim at giving each hatchery member enough tasks and work to meet the aforementioned number of hours. There is no general agreement on, for example, the minimum number of hours required for the course's approval. Some flexibility with regard to the number of hours can be exercised, provided that the student nonetheless actively performs all tasks assigned to him or her, thereby contributing to the implementation of the hatchery's commission. To monitor their own activities, hatchery students may also choose to keep a separate journal or account of the hours they have put in.

One of the course's objectives is to train students in collaborative learning and work. Attendance is therefore important. This is why the hatcheries maintain a record of attendances and absences. If a hatchery student fails to attend hatchery sessions on three occasions, the student tutor should invite the student to a discussion and call attention to the absences. A fourth instance of absence means that the student's project hatchery performance will fail and that he or she has to complete the hatchery course again the next year. Lateness should be avoided, since being an hour late will be counted as an absence. Not even absences due to an illness can be made up for with a doctor's certificate. Instead, the hatcheries should agree their own ground rules on how to make up for permissible absences, the maximum amount of which is three.

Schedules must complied with – continuous lateness in the submission of tasks and assignments and other problematic behaviour constitute sufficient grounds for failing the student. Even in such cases, the matter must be discussed with the student in question prior to the failure. The teacher tutor

must be present in such discussions, and it would also be advisable to give the student a written warning. Hatcheries may also agree on other ground rules of their own.

The student tutor's role and the rules applicable to student tutors

Always be there and guide the hatchery members to the right place!

Project hatchery activities and the role of a hatchery tutor mean that the student is obligated to be present. This is why the student tutor, too, must be present every Friday. Student tutors may not have other classes or work to attend to during the hatchery's regular sessions!

Information sessions on matters that have an effect on hatcheries will be arranged according to separately agreed-upon schedules during the project hatchery course. It is the student tutor's task to ensure that the relevant hatchery student attends the information sessions. Likewise, the student tutor should ensure that the hatchery members are appropriately present at any other events related to hatchery activities, such as the opening info session and final presentations.

Inform your hatchery members of the project hatchery's general rules!

Given that the student tutor is responsible for the group formation of the entire hatchery, it is essential that he or she treat each hatchery members according to equal terms. The rules concerning the project hatchery must be reviewed during the very first meeting, and student tutor should ensure that everyone agrees to follow those rules. If problems emerge, the rules are reinstated.

Collect the contact details of your hatchery members and help them organise!

The student tutor collects the contact information of every hatchery member (name, phone number and e-mail address) and distributes them in the way he or she sees fit. While the student tutor usually acts as the project leader during the first project meetings, a project manager and secretary should be selected as soon as possible. The student tutor is tasked with helping the hatchery members select the people responsible for the aforementioned and other tasks.

Monitor and evaluate the hatchery members' participation!

To document students' participation and ensure sufficient attendance, the student tutor should draw up an informal memorandum on hatchery members' presence on Fridays. He or she may also use this memo to jot down other observations on the hatchery members' work and activities. If necessary, the memorandum can be used as a basis for failing a student's course performance. The reason for failing a student may be more than three absences, turning in reports or other material late (after several requests to do so) and negligent participation in hatchery activities or the neglect of assigned tasks. In addition, the memorandum is used as an aid when evaluating students.

When the student tutor actively monitors the hatchery members' activities, he or she will have the best knowledge about each student's performance in the hatchery once it concludes. It is the student tutor's task to evaluate the activities and participation of hatchery members in cooperation with the teacher tutor. Instructions for the evaluation and assessment will be provided by the teacher tutor.

Remind your hatchery members about internal communications!

The hatchery should come up with a suitable communication channel for the purposes of communication outside the hatchery sessions (Facebook, Whatsapp, Optima's discussion forum, or the like). The channel should be available to and accessible by every hatchery member. No-one should be pressured to join a social media because of the project hatchery.

Give advice on reporting and create a positive working climate!

One of the student tutor's responsibilities is to provide advice on how to fill in personal reports and other forms related to hatchery activities. He or she should also ensure that any such documents are turned in by the agreed time. The student tutor must try to create a good atmosphere and a positive attitude towards hatchery work and be able to justify why some tasks or reports must be completed. When necessary, the student tutor can get help and instructions from the teacher tutor or the tutoring team, in which problems can be discussed collectively.

Encourage, motivate and activate, but leave responsibility for the project to the hatchery's members!

As is the case with any other group activity, project work typically involves stages when the work stalls. When this happens, the student tutor should use all means necessary to encourage the hatchery to continue its work. He or she should help the project manager to activate everyone, including the taciturn ones and the hatchery members with less initiative. This will also allow the student tutor, for his or her part, to avoid situations where a hatchery member drops out of the course. However, the student tutor is not responsible for the project's success, which is the responsibility of the hatchery members. This is why the student tutor should not do the project manager's work on his or her behalf or provide the project manager with ready solutions. What the student tutor can do is to help the project manager by giving examples of how previous hatcheries have successfully coped with similar situations.

Other hatchery roles

Commissioner

The commissioner plays an important role in the hatchery. The topic given by the commissioner forms the basis of the hatchery's work. The commissioner must be aware of the procedures of hatchery activities so that it can, when necessary, limit the scope of the commission, set realistic objectives for the hatchery and cooperate with, for instance, the project manager.

The teacher tutor is responsible for communication with the commissioner before the hatchery begins. The teacher tutor informs the commissioner of the principles of hatchery operations and ensures that the commissioner understands and accepts these principles. It is advisable to invite the commissioner to a meeting during the initial phases of the hatchery. This will give all parties a chance to meet one another and to discuss the commission, procedures, goals and other key issues. The invitation to the first meeting is usually sent by the teacher tutor. Although subsequent meetings with the commissioner are usually taken care of by the hatchery members themselves, the student or teacher tutor may also stay in touch with the commissioner during the hatchery period, should it be necessary.

Depending on the requirements of the commission, the hatchery should maintain sufficiently frequent communication with the commissioner, to give the commissioner an idea of how the work is progressing. This will also provide the hatchery with an opportunity to hear the commissioner's opinions or instructions concerning the work in progress.

During the final phases of the hatchery, the commissioner usually participates in the feedback discussion. The feedback discussion is conducted according to instructions provided by the teacher or student tutor. The feedback session also functions as the project's closing event for the hatchery members and the commissioner.

Teacher tutor

The teacher tutor is tasked with guiding and instructing the student tutors. The tutor teams convene at least every other Friday to discuss hatchery-related matters under the teacher tutor's leadership. The teacher holds ultimate responsibility for the successful realisation of the project hatchery course. It is his or her responsibility to support the student tutor to act in a way that steers the hatchery work towards the desired goal. Thus the teacher tutor is the student tutor's most important source of support and influences, together with the student tutor, the evaluation/approval or failure of the project hatchery's students. The teacher tutor reviews the feedback received from hatchery members in a development discussion held with the student tutor. The teacher tutor also evaluates, on his or her part, the student tutor's activities.

Project manager

The project manager holds great responsibility for the project's progression. He or she organises the work and divides it equally among hatchery members. In addition, the project manager supervises the work's progress and takes care of scheduling. As the hatchery's chairman, he or she must be encouraging and contribute to the creation of a good and active atmosphere. He or she must furthermore be interactive and social towards all hatchery members. The project manager's tasks also include participation in the evaluation discussion held with the student tutor and the collection of feedback on the student tutor's activities from other hatchery members at the end of the hatchery which the project manager must then summarise and deliver to the teacher tutor.

PICTURE 1. *A project manager giving instructions to the hatchery group (picture: Mika Sillanpää).*

Secretary

The secretary is tasked with writing minutes of each hatchery session, starting from the very first one. The minutes provide an account of how the hatchery is progressing and what was done during any particular session. The minutes should be simple and clear and understandable to each hatchery member. The minutes should include a detailed account of what has been done in the hatchery and on how the work will continue, so that any possible absentee students can get straight back to work once they are present again. In addition, the minutes will provide hatchery members with a clear picture of how the entire hatchery is progressing. The person or people responsible for making the poster, for example, may not necessarily know how the presentation's preparation is going, if such things are not written down in the minutes. The minutes should be made available via the group's shared communication channel (e.g. Optima) to ensure that everyone sees and reads them. In addition to the minutes, the secretary must maintain all hatchery-related documents in such a way that they are always available to all hatchery members. In hatchery work, the secretary functions as the project manager's right-hand (wo)man.

PICTURE 2. *The project manager in a discussion with the secretary. (picture: Mika Sillanpää).*

Hatchery student

The student's responsibilities include performing any tasks assigned to him or her as well as possible and within the agreed timetables. His or her tasks can include poster making, for example, or communicating with stakeholders or acting as a deputy to the project manager/secretary. In addition, each hatchery always has other special tasks related to the project in which the student participates.

PICTURE 3. *Sometimes you just don't feel that diligent (picture: Mika Sillanpää).*

The material produced by the hatchery

Each hatchery draws up a project plan, poster and the hatchery's final essay. Each hatchery furthermore produces a hatchery presentation on its activities. To this end, all hatcheries are provided with common instructions which they should save in their shared workspace on Optima. The student tutor guides and advises hatchery members on compliance with the common instructions.

Project plan

The project plan is drawn up on the basis of a ready template, available in Optima (as are all other materials). At its minimum, the project plan should contain:

- the hatchery's topic and objectives,
- the organisation and implementation of hatchery activities,
- a risk survey,
- communications,
- scheduling.

The project plan's timetable, for example, should indicate the submission dates of all materials that need to be turned in and any other dates with relevance for the project hatchery in question. The timetable should be planned carefully, and the dates therein should be observed. Once the project plan is ready, it is distributed to all hatchery members and performs its part as a tool that guarantees the hatchery's success. When necessary, the teacher tutor can go through the plan and comment on it. The student tutor sends the completed and proofread project plan to the person responsible for the study unit on the date stated in the instructions.

Poster

Each hatchery makes a poster about its activities. Sometimes the work's commissioner, for instance, may have wishes concerning the poster's content. The hatchery should take such wishes into account. According to the general instructions, the poster must, in any case, nonetheless meet the following requirements:

- The poster's size should be 70 x 1,000 mm, with a 150 dpi resolution (Photoshop).
- The poster's must have a 2 mm trimming edge, meaning that the graphic measurements are 696 x 996 mm.
- If the poster is drawn up in A4 size (with, e.g. Word), its resolution must be 600 dpi. The printouts of pictures and pictures with a smaller resolution than that will not be as clear.
- The gradient fills of Word and PowerPoint should not be used, since they do not print clearly in enlargements. The gradient fills of desktop publishing software can be used.
- The hatchery's number must be indicated in the poster's bottom right-hand corner either in print or on a subsequently attached separate note.
- The poster is delivered to the person in charge of hatchery activities in PDF format. It should be accompanied with the original file and pictures.

For the purpose of printing, the poster must be finished by the agreed date and time. Groups will be informed about the date, time and place of delivery/submission in the common instructions. They will also be informed of when and where they can collect the printed poster and of the location of the poster display. Each hatchery takes care of its own poster's delivery and the collection of the finished poster and its display in accordance with the instructions. Students and staff can select the best poster in an electronic vote, in which everyone can vote for two posters. Everyone may take part in the vote – including the hatchery members themselves – and voting for the poster of one's own hatchery is allowed. The hatchery that made the poster that collects the most votes is awarded.

Final essay

The final essay is an informal account on the hatchery work drawn up by the entire hatchery. It recounts the challenges, successes and failures encountered during the work and what was learned in the hatchery. Guidance and advice is provided primarily by the student tutor, but also by the teacher tutor, when necessary. The best essays are published in print form. The final essay is handed in to the student tutor, who delivers it to the person responsible for the study unit by the agreed date and time. Should the commissioner require a more formal report or some other form of final output, such as a video, this is also produced.

Project presentation and finals

The presentations of project hatcheries are held simultaneously in three auditoriums according to a predetermined schedule and a presentation order drawn by lots. The presentation of each hatchery must be at least 10 minutes but no more than 15 minutes long, and it will be evaluated according to agreed criteria. The evaluators are composed of student and teacher tutors and the evaluation focuses on, among other things, whether the presentation proceeds in a logical manner. Other aspects evaluated include the presentation's illustration and the various means of expression employed by the presenters. Rapport with the audience is also considered. This being the case, diverse illustration/demonstration materials and any other interesting aspects are a plus.

The student and teacher tutors evaluate the presentations, and the two best presentations given in each auditorium are entered in the finals. The finals are

held a week after the first presentations. The three best hatcheries in the finals are awarded, and the winner receives a special award.

The presentations are recorded by video and the people who appear in the presentations are considered to have consented to the filming and the subsequent showing of the recording for, for example, research purposes. If the commissioner forbids such filming, this is naturally agreed to.

The presentation should be made as interesting as possible. In other words, mere slide shows are not desirable. Presentation should be smooth and notes may not be used. The presentation is given to the teacher and student tutors in advance, and they should assist in its fine tuning. Indeed, the student tutor should instruct the hatchery members on the preparation and exercise of the presentation well in advance.

Personal reports

Hatchery students' personal reports

Each hatchery student draws up two personal reports, the first in October and the second one in December. The most important purpose of personal reporting is to help the student perceive what he or she has learned during the hatchery. It also serves the purpose of collecting information that is used for the study unit's development.

All hatcheries are provided with common instructions on reporting. The student tutor should urge hatchery members to prepare honest and thorough reports. The reports are submitted to the student tutor in electronic format by the agreed date and time. The reports can be turned in via the shared workspace in Optima, for example. Once the hatchery has concluded, the student tutor combines each student's two reports into a single file and delivers the files to the teacher tutor.

To support his or her reporting, each student may choose to keep a record of the hours he or she has spent on project work. Such records or lists may prove helpful in the evaluation and assessment of more taciturn or "invisible" students. It may raise one's grade and will be submitted in connection with the personal report.

Student tutor's report

The student tutor's report is an informal account in which the student tutor relates his or her experiences in the hatchery and the things he or she has learned. The reports are handed in to the person responsible for the study unit by the agreed time. The date may be postponed in cases where the hatchery has not yet finished its project. A well written report may raise the student tutor's grade.

Assessment

An approved project hatchery study unit (course) is assessed on a scale of 1–5. The assessment criteria are based on the implementation plan and will be introduced to the students at the beginning of the study unit. Recurring lateness, more than three absences, the excessively late submission of reports or a neglect of hatchery activities can lead to a failing grade. In problem situations, the student and teacher tutor must have a talk with the student in a sufficiently serious spirit.

Those participating in project hatcheries will also receive feedback on their work in feedback discussions, in which tutors discuss their work contribution with students. This also provides students with the opportunity to assess the success of himself or herself and the student tutor. The goal is for all parties to benefit from the discussions.

The assessment relies on the forms for self-evaluation, peer assessment and the student tutor's assessment. They are filled in according to instructions provided by the teacher tutor. Students should also fill in any other possible questionnaires according to instructions provided by the teacher tutor.

The student tutor's approved activities will also be graded on a scale of 1–5. The prerequisite for this is that the student tutor has turned in his or her own report to the person responsible for the study unit. The student tutor's grade is influenced by the feedback given by students, the project manager and the teacher tutor. The feedback is submitted to the person responsible for the study unit by the teacher tutor or the project manager. All hatcheries will be provided with common instructions on the collection of feedback.

Scheduling

It would be beneficial to take down important dates concerning the project hatchery in, for example, table format. Such tables enable the easy monitoring of schedule implementation during project work.

Project hatchery begins	date
Project plan	date
Poster material finished	date
Return of personal reports	date
Project's final presentation	date
Finals	date
Project's final essay	date
Student tutor's report	date

APPENDIX 3. ASSESSMENT FORM FOR HATCHERY PRESENTATIONS

Evaluation of hatchery presentation

Hatchery no. _____

Evaluator _____

The hatchery's shared objectives:

The student

- gains experience in an exploratory approach to work and learning,
- learns how to work in a multidisciplinary group and gets to know students of other degree programmes,
- starts to create the networks necessary in working life,
- develops his or her skills in project work,
- enhances his or her presentation and interaction skills.

1. The presentation progressed in a logical way.

agree 5 4 3 2 1 disagree

2. The illustration/demonstration worked.

agree 5 4 3 2 1 disagree

3. The language of the presenters suited the occasion.

agree 5 4 3 2 1 disagree

4. The presenters were able to build a rapport with the audience.

agree 5 4 3 2 1 disagree

5. The project's objectives were presented clearly.

agree 5 4 3 2 1 disagree

6. The project objectives that were introduced were successfully implemented.

agree 5 4 3 2 1 disagree

7. According to the presentation, the hatchery's common objectives* were successfully achieved.

agree 5 4 3 2 1 disagree

8. According to the presentation, learning in the hatchery was diverse.

agree 5 4 3 2 1 disagree

APPENDIX 4. THE STUDENT'S PERSONAL REPORTS

Turku University of Applied Sciences
Project hatchery / October 2014

Where are we, project hatchery

Name:_____

My hour accrual:_____

Consider the progress of your project hatchery's commencement.*Examine* your own work within the hatchery and answer the following questions as diversely as possible. *Give reasons* for your answers.

- How well have gotten to know one another within your group?
- How has your project progressed?
- To what degree has each hatchery member engaged in and performed the work?
- How much effort have you put into the project?
- What have you done to move the project forward?
- Are you satisfied with your own contribution? Could you improve upon it in some way?
- What hatchery-related issues have you taken care of outside of Friday hours?

Turku University of Applied Sciences
Project hatchery/December 2014

The project hatchery as a learning experience

Name:_____

Think about the project hatchery work this autumn from the perspective of your own learning. See the questions listed below for help. *Examine* your learning from as many aspects as possible and provide *reasons* for your answers.

- In which hatchery tasks did you play an important role?
- What kinds of hatchery-related things did you do outside the Friday sessions?
- How did your efforts and contribution develop as the work progressed?
- Did the course improve your innovation skills? If so, in what way?
- Did the course improve your presentation skills? If so, in what way?
- Describe your motivation during the autumn's hatchery work.
- What kinds of networks have you created outside your hatchery (other hatcheries, external organisations, the staff at the university of applied sciences, etc.)?
- What kinds of problems or difficulties did you hatchery face? What do you think were the causes of these problems? How were the problems dealt with in the hatchery?
- What were the positive aspects of hatchery work?
- What did you learn during the project hatchery course?

APPENDIX 5. STUDENT'S SELF-EVALUATION FORM

Project hatchery: _____

My name: _____

THE OBJECTIVES and their achievement; evaluate numerically and write down your own evaluation on how well you achieved the set objectives during the project hatchery below. Feel free to comment (5 = agree, 1 = disagree)

I became familiar with collaborative learning.

disagree 1—2—3—4—5 agree

Comments:

I learned to search for and use information independently.
1—2—3—4—5

I learned how to work in a multidisciplinary group.
1—2—3—4—5

I became familiar with the faculty's different degree programmes.
1—2—3—4—5

I began to form networks.
1—2—3—4—5

I developed my skills in project work.
1—2—3—4—5

I improved my presentations and interaction skills.
1—2—3—4—5

I began to develop my innovation skills.
1—2—3—4—5

My evaluation concerning my work in the project hatchery.

S (= satisfactory)

G (= good)

E (= excellent)

APPENDIX 6. STUDENT'S PEER ASSESSMENT FORM

Peer assessment

Project hatchery: _____

My name: _____

THE OBJECTIVES and their achievement; evaluate numerically how well the other students in your project hatchery achieved the set objectives during the project hatchery. You can give verbal feedback in the space provided for it at the end of the form. Students should not evaluate their own performance on this form, but leave the relevant space empty. Evaluate each student's achievement of seven (7) objectives (in grey). Fill in each cell with a number on a scale of 1...5. The person in charge of the project copies or writes the hatchery members' names on the table's rows.

Evaluation:
completely disagree 1 2 3 4 5 completely agree

		The student became adept at an exploratory approach to work and learning.	The student learned how to look for and use information independently.	The student learned how to work in a multidisciplinary group.	The student got to know students from the faculty's other degree programmes.	The student began to form networks.	The student developed his or her skills in project work and innovation.	The student improved his or her presentation and interaction skills.
Joe	Public							
Paavo	Virtanen							

Verbal assessment:

APPENDIX 7. STUDENT TUTOR'S ASSESSMENT FORM

Project hatchery: _____

Name of student tutor: _____

Grade: ____(Evaluate on a scale of 0–5, with 5 = excellent) Justify the grade you give.

Write your estimate on how well the student tutor performed his or her tasks during the project hatchery phase (good, bad, comments to pass on):