Guide for Students in Experts in Teamwork

Spring semester 2020

◉ NTNU
Experts in Teamwork

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in Experts in Teamwork

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Dear
EiT student

What you are now holding is a guide for students in the course Experts in Teamwork (EiT) at NTNU in Trondheim. The guide is designed to provide students with information about the course and support for completing it.

EiT normally takes place in the fourth year in the spring semester. The idea is that you have then developed enough knowledge of your discipline to meet students from other disciplines and to learn how to work together across subject boundaries. The experience we have gained from EiT is important knowledge for students from all fields to bring into the workplace. Demand from the business community for skills in interdisciplinary cooperation was another reason for launching Experts in Teamwork. The course was established in 2001, when it was limited to engineering students.

The next year, NTNU was awarded the Prize for Education Quality for the course from the then Ministry of Education and Research, and during the same year the Board decided that EiT should be made compulsory in all master's programmes. Feedback both from external organizations and from those involved in the course indicates that the course is still highly relevant and that teamwork skills are more important in the workplace than ever.

"Through EiT, I have been able to develop my personal characteristics to a far greater extent than I had expected at the start of the project. I have gained greater insight into my positive aspects. At the same time, I have had the opportunity to work with things that used to be difficult for me. To give feedback and to receive it in a good way has been challenging. Through the exercises and the group interaction we've been through, we gained experience with this, and I emphasize this experience as the most positive thing that EiT has given me."

Magnus Domben
Student in social economics

What characterizes Experts in Teamwork?

A high degree of cooperation between people with different backgrounds, experience, skills and knowledge is one of the characteristics of working life today. Working together across disciplines with people you do not know well, and who think differently from the way you do, is both enriching and challenging. In EiT, the goal is to develop **cooperative skills**, and thus gain meaningful experience to take with you into the working world.

You do this by applying your own academic skills in an interdisciplinary project, together with students from diverse programmes of study at NTNU. Instead of learning theory about cooperation using a knowledge-based form of learning, you gain cooperative skills through experience-based learning, which involves experiencing and reflecting on teamwork in practice. Read more about this in the Book of Reflections on p. 6-7.

In EiT we use **facilitators** who observe you while you work, and who share their observations with you from time to time so that you become aware of aspects of your own cooperation that you can choose to reflect on together. Read more about facilitation in the Book of Reflections on p. 8-13. You are expected to spend time together exploring and discussing aspects of your teamwork, and to implement measures (actions) to change or reinforce this. The team's experiences are gathered in a separate process report at the end of the semester. This forms the basis for 50% of the grade in the course.

The other half of the grade is an assessment of the team's project, which is also described and discussed in a report. The projects vary from village to village, but a common factor is that they shed light on relevant problem areas from societal and working life. The problem formulations that the teams try to address are developed by the teams themselves, based on their combined expertise. One aim is that all the students in the team will apply their **academic learning** in their project work. Students should also have an opportunity to extend their perspective on their own academic competence, and they should help to make the most of other people's knowledge in interdisciplinary teamwork.

Students in Experts in Teamwork
Book of Reflections
2020
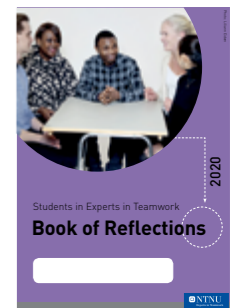
Tip: Use the Book of Reflections

Experience has shown that EiT-students often find reflection challenging. The Book of Reflections contains texts and models that might be a help you to understand what we mean by reflection in EiT, and we encourage you to read the texts on the first page 2-26.

Illustration photo: Liliann Eidem

For several years student teams in EiT have worked together with external partners, including the Norwegian Labour and Welfare Administration (NAV). Hilde Merete Bygland, who heads NAV Midtbyen in Trondheim, says that they have been impressed with the students' solid academic expertise, representing medicine, art, industrial economics and educational theory and practice among other fields. "Their feedback was closer to the mark than what we think a consulting firm could have given us," she says.

An intention of EiT is that, in their projects, student teams will work together with **internal and external partners** in their project work, for example businesses, organizations or NTNU's strategic areas of focus (TSOs). This creates a unique opportunity for links between external organizations, internal academic environments and students pursuing their education. The collaborative partners can introduce you students to complex problem areas, which you can use as a starting point when you develop your own problem formulation. The contact between students and collaborative partners can contribute to continuation or realization of students' proposals and ideas from the student teams.

All the best for your participation in Experts in Teamwork!

Bjørn Sortland
Head of EiT

"NTNU has led the field in the higher education sector with its Experts in Teamwork programme. Through EiT, students develop good interpersonal skills that can help to create new ideas and innovative solutions – both in the workplace and in major social challenges. EiT thus gives students with different academic backgrounds extra skills in working together, and this is very important in the workplace."

Arvid Ellingsen
Special Adviser in the Norwegian Confederation of Trade Unions (LO)

Content

Course description 2019/2020

Experts in Teamwork (EiT)
Eksperter i team (EiT)

Academic responsibility: Bjørn Sortland
The professor (village supervisor) and village theme for each village are presented on the websites: www.ntnu.no/eit (Norwegian) and www.ntnu.edu/eit (English)
Course credits: 7.5
Taught only in the spring semester

Intention
In Experts in Teamwork, students develop teamwork skills by reflecting on and learning from specific situations of cooperation in carrying out a project. Students work in inter-disciplinary teams with participants from diverse programmes of study. Interdisciplinary teamwork is used to develop students' cooperative skills. The purpose is to improve project work. Relevant problem areas from society and working life form the starting point for this teamwork. The results achieved by the teams can be used to benefit internal and external partners.

Learning method
The learning method in EiT is experience-based. A key aspect of the learning process is the situations that arise as team members work together across their disciplines. Students develop skills in collaboration by reflecting on the-se situations throughout the project. Team members perform reflection activities together, stimulated by facilitation

as well as a variety of exercises such as writing down reflections, exercises in teamwork, and feedback. The EiT Academic Section creates the professional foundation for facilitation, which is carried out by the village supervisor and learning assistants.

Expected learning outcomes

Knowledge
- Students have gained knowledge about group processes and are familiar with key concepts and prerequisites for good teamwork.
- Based on experience from the team, students can describe the prerequisites for good interdisciplinary teamwork.
- Students have insight into how their teamwork is influenced by their own behaviour patterns and attitudes, as well as those of others.

Skills
- Students can apply their academic learning in cooperation with people from other subject areas, and jointly define problems and find solutions to them.
- Students can apply fundamental group theory and concepts to describe their own specific collaborative situations.

- Students can reflect on their teamwork and analyse the way that the group communicates, plans, decides, accomplishes tasks, handles disagreements and relates to professional, social and personal challenges.
- Students can provide feedback to the individual team member and to the team as a whole and can reflect on feedback from the team.
- Students can take initiatives (actions) that encourage cooperation, and they can contribute to changing patterns of interaction to create more productive, constructive and social collaboration in a group.

General competence
- Students have extended their perspective on their own specialized knowledge in their encounter with skills from other disciplines. They can communicate and use skills they have developed in their own field in collaboration with students from other disciplines.
- Students can collaborate with people from other disciplines, and they can contribute to realizing the potential of their combined interdisciplinary expertise.

Framework
Students in EiT are divided into villages of up to 30 students, and each village is divided into interdisciplinary teams of five to six students. The language of instruction is either English or Norwegian. Each village is headed by a lecturer, called the village supervisor. In addition, two learning assistants in each village facilitate the student teams. Each village has a broad overall theme related to societal issues or working life. This theme forms the basis for the student team's project work. The village may have external partners who may serve as advisers and recipients of the students' work.

The village themes are presented on the EIT website, and the desired combination of subjects in the villages is specified as a guide to help students choose a village.

Students submit their preferences for five villages in order of priority through StudentWeb by 1 November each year. To ensure interdisciplinary teams in the villages, each student is encouraged to choose at least two villages from a faculty other than the one the student comes from. Students are allocated to the villages on the basis of their preferences, the village's need for competence in various disciplines, and the number of places in the village. NTNU in Gjøvik and NTNU in Ålesund each have their own framework, presented on the EiT web pages.

Learning activities
Teaching consists of both teacher- and student-directed activities. At the beginning, activities are arranged to introduce the students to each other. The village theme is presented to the students, who draw up a cooperation agreement in the team. The student team draws up a proposal for their project based on the village theme and the individual student's academic competence and interests. After approval by the village supervisor, the student team works with the project throughout the semester or the intensive period. The student team is responsible for following up the cooperation agreement and for revising it if necessary.

The student team is facilitated while the members work. To be facilitated involves being observed and receiving feedback on the interaction in the team. Students write both personal reflections and team reflections. Reflections initiated by facilitation and writing of reflections provide the basis for understanding the prerequisites for good collaboration and

how the individual member's actions influence the team-work. The team must take actions to improve its teamwork if necessary. What is meant by "actions" is defined in the assessment criteria. The effect of the actions must be evaluated.

Compulsory activities
- Attendance is compulsory.
- Preparation of a cooperation agreement between the members of the student team during the first two village days.
- Oral presentation of the project and a dialogue about the teamwork in the student team when the teaching ends.

The compulsory activities must be approved by the village supervisor before the final reports are submitted for assessment. Participation by the entire student team is a prerequisite.

Final reports
These consist of a project report and a process report by the students. The project report must describe the student team's problem formulation and the result of the project work. The process report must describe the collaboration in the team and what the individual has experienced and learnt through shared reflection on relevant situations from the project teamwork. Expectations for the student team's work and criteria for the evaluation are described in the *"Guide for Students: Experts in Teamwork"*.

Form of assessment
The final reports (the project report and the process report) by the student team are assessed according to the grading scale A–F. The team receives one common grade.

The project report and the process report are each worth 50% of the final grade.

In the event of a "fail" grade or a resit of a passed examination, the entire course must be repeated.

Attendance
EiT is taught in the spring semester:
- Intensive villages: Daily attendance for three weeks in January (time: 08:00-16:00)
- Semester-based villages: Attendance each Wednesday throughout the semester (time: 08:00-16:00)

Required previous knowledge
EiT is normally compulsory in all programmes of study at second-degree (master's) level at NTNU. The programme descriptions for the programmes of study provide information about the stage in the programme at which EiT is to be completed and whether EiT can be taken as an intensive or semester-based course. Other students may apply for admission to EiT, but must be qualified for admission to a master's programme in order to participate. Students must be able to speak the language of instruction (Norwegian or English).

Course materials
- Book of Reflections for students in Experts in Teamwork, which is distributed at the start of studies
- Guide for Students: Experts in Teamwork, which is available at the EIT website
- Compendium for students in Experts in Teamwork, which will be made available digitally

Approved by the Rector as the governing body for EiT.

Compulsory activities

These are compulsory activities in EiT:
- Attendance is compulsory.
- Preparation of a cooperation agreement between the members of the student team during the first two village days.
- Oral presentation of the project at the end of the teaching period.

- A perspective dialogue on the team process at the end of the teaching period.

The compulsory activities must be approved by the village supervisor before the final reports are submitted for assessment.

Attendance

Attendance of every village day is compulsory. See the calendar at the end of the guide. The course description states that the whole day (08:00 - 16:00) is reserved for work with EiT. This means that students must not have any other lectures or obligations on that date.

Teamwork skills can only be developed when the team gathers and works together. Exercises and facilitation stimulate reflection in the student team, and provide the basis for learning. The learning activities require the team to be together for the whole day, and to be present in the village room at the agreed times. Because the course is experience-based and the experiences must be described in a team-based report, the absence of individual team members will have a negative effect on the rest of the team.

A minimum of 80 % attendance is required for approval of

Photo: Liliann Eidem

The learning activities in EiT require the student team to be together.

EiT attendance. If a student has more than 20 % absence, does not attend the first or second village day, does not participate in the project presentation, or does not participate in the perspective dialogue, this will result in a fail grade for the course. The village supervisor cannot grant exemption from the rules for attendance. Further information about the practice of the rules for attendance is available from the faculties. The faculty of the village supervisor decides on matters concerning attendance.

Cooperation agreement

The foundation for the work in teams is created at the beginning of the semester. As participants in a team, you are mutually dependent on each other's efforts, contributions and presence. For cooperation to work, some rules are needed. The students in the team must discuss which rules will apply and write them down in a cooperation agreement. This is a compulsory activity that must be performed during the first two village days, which is a condition for approval of the course.

It is a prerequisite that everyone in the team participates in drawing up the cooperative agreement. It is important that the agreement is concrete, and describes what is expected of the individual. Everyone in the team must accept responsibility for the cooperation agreement by signing it. If a dispute arises in the team, the agreement must be used as a basis for a mediation meeting; see p. 15. The cooperation agreement should be evaluated during the semester or the intensive period, and revised if necessary.

As a minimum, the team's cooperation agreement must cover the following points:
- Expectations for the individual's contribution during cooperation and for the final products delivered.
- Climate of cooperation - how does the team want to communicate?
- Non-conformances/disagreements – how will these be handled?

Remember that the village supervisor approves the teams'

During the first two village days, the student team draws up a cooperation agreement that must be signed by everyone in the team.

cooperation agreements.

It is important for the teams to be conscious of what they have agreed on in the cooperation agreement. The facilitator team should make arrangements for ensuring that the agreements are kept active, through revision of the agreements as needed.

> Our student surveys show that active use of the cooperation agreement helps to raise the quality of interdisciplinary teamwork in EiT.

Oral project presentation

The student team must present the results of their project at the end of the teaching period, and it is a prerequisite that everyone in the team participates in the presentation. The team should point out the benefits of the project results to society, and how the work might be continued, if this is relevant. Students should also describe how they have taken advantage of their interdisciplinary breadth, and how the academic composition of the team has influenced their work.

The project presentations by the student teams should normally be open to the public. For example, they may take place in turn in an auditorium (usually 20 minutes for each team). Posters in the form of an exhibition can also be used for the project presentation. Here, the teams attend, present their project and answer questions. If the team has worked together with an external partner, the partner should be present at the presentation. The external partner should comment on the students' results, and possibly say something about the value that the results might offer for their activities or for society. The village supervisor decides on the framework for the presentations, and should invite relevant people to attend them.

The project presentation does not count towards the grade.

If a student has a legitimate reason for absence from the presentation of the project, he or she must present the project to the village supervisor at another time.

Perspective dialogue on the team process

Each team must have a dialogue with the village supervisor about the team's cooperation process at the end of the teaching period. It is a prerequisite that everyone in the team participates in the dialogue. In the perspective dialogue, students must reflect on what has taken place, in addition to looking ahead. What was challenging and enriching in the communication between the different disciplines in the team? How has cooperation developed in the team? What have each of the individuals learnt about their own habits and attitudes in their teamwork? What have you learned in EiT that you want to take with you into the world of work?

The perspective dialogue should be a conversation between the students in the team, the village supervisor, and if applicable the learning assistants. The dialogue is not intended to be open to everyone in the village, but is held only within the team. The teaching assistant may attend.

The perspective dialogue does not count towards the grade.

If a student has legitimate absence during the perspective dialogue, he or she must meet the village supervisor at another time to discuss the teamwork.

Accommodations, exemption and exclusion from the course

Experts in Teamwork (EiT) is a compulsory course that more than 2300 students complete every year. For some students,the group-based approach to work in EiT may present extra challenges. Below you can find information about possibilities for adapting the study situation and exemptions.

Students who need adaptive measures or support services

NTNU has a duty to provide suitable conditions for study for students with special needs, as far as possible and reasonable. Students who need adjustments or adaptive measures should contact their department or faculty, or the Student Services Division disability office (NTNU Tilrettelegging). For more information, see innsida.ntnu.no/tilrettelegging

Examples of conditions where adaptive measures can be provided:
• attention deficit/hyperactivity disorder (ADHD)
• dyslexia or other reading or writing difficulties
• visual impairments
• hearing impairments
• mental health issues
• motor and mobility impairments
• Asperger's syndrome

The adaptive measures must not result in lower academic requirements for the individual programme of study (see Section 4.11 of the Act relating to Universities and University Colleges). For example, in EiT it is not possible for an individual student to write his or her own team process report.

Exemption from the course
It is possible to apply for an exemption for students who cannot complete EiT for psychological or physical reasons. Relevant documentation (a medical certificate, statement from a psychologist, or similar) is required. If the student is granted an exemption, he or she must take another course at master's level that is relevant to the programme of study. More information about applying for an exemption is available on EiT's home page for students.

Exclusion of individual students
Important: Please note that EiT has procedures for mediation and exclusion from the course. Individual students can be excluded from the course if they cause major problems for cooperation in the team and/or avoid doing their share of the work as agreed in the student team's cooperation agreement or in other ways. Dissatisfaction about the individual student's participation or contribution must be taken up in the team as early as possible, and the situation must be documented in writing right from the start.

Experience shows that the sooner issues like this are put on the agenda, the easier it is to find a solution. In such cases it is recommended that the student team contacts LL and LA at an early stage.

The village supervisor's faculty decides whether students should be excluded from EiT or not. Each faculty has its own EiT contact person whom the village supervisor can contact for assistance in a possible exclusion process.

Mediation
All parties should try to resolve the conflict instead of starting a process to exclude the student. For this reason, a mediation meeting must always be held before a possible exclusion case is presented to the village supervisor's faculty. Mediation should shed light on the issue from each party's point of view. The purpose of mediation is to make the arrangements needed to enable the student to continue in the team. The student who is being considered for exclusion may bring a neutral party (student ombudsperson, student chaplain, student adviser from the department/faculty, family member, friend or other person) to the mediation meeting. If the student does not want to take part in a mediation meeting, he or she must have the opportunity to make a statement in writing within a specified time limit.

For more information about the mediation meeting, please contact the village supervisor

Contact information EiT Academic Section:
kontakt@eit.ntnu.no
EiT's website: www.ntnu.no/eit (Norwegian) and www.ntnu.edu/eit (English)
The Student Services Division disability office (NTNU Tilrettelegging): innsida.ntnu.no/tilrettelegging

Final reports

In the completion phase, the students write a project report and a process report.

Each student team must submit one project report and one team process report. Together, the reports must show what the students have been working on, and how they have developed collaborative skills in their interdisciplinary teamwork. Descriptions of personal and relational issues must be collected in the team process report, which will be a confidential report. This means that the report must only be used in connection with assessment and that consent from the team members must be obtained in other cases. The results of the project work and the students' application of their discipline knowledge must be described in the project report.

The course description (p. 8) and the assessment criteria on the next page provide the formal framework for the reports. Each report counts for 50 % of the final grade.

The final deadline for submission of the reports is one week after the last village day.

The team process report

In the team process report, the students must describe and discuss the collaboration in the team and what the individual has experienced and learnt through shared reflection on relevant situations from the project teamwork.

The team process report must not exceed 25 pages (this does not include the cover, references and any appendices).

The project report

In the project report, the students must describe and discuss the team's problem formulation, methods and results. In addition, they must evaluate how each team member has contributed with his or her academic competence in the project, as well as how the team has applied its inter-disciplinary breadth.

The village supervisor defines the format and scope of the report.

Product

In addition to the project report, students can create a product, such as a feature article, an "app" for a mobile phone, a game or a public health initiative. Creating a product puts the focus on users and supports development of innovative attitudes, but it is important to emphasize that the product itself is not part of the final work and the basis for the grade. If students want to create a product, this must be described and analysed in the project report so that learning outcomes and assessment criteria are met.

Students that have made a board game.

Assessment criteria

The team process report

Grade	Prerequisites		The team process	
	Situations	**Theory**	**Reflections** on situations the team has highlighted	**Actions** - steps to improve cooperation
A An excellent performance, clearly outstanding	Selects teamwork situations and describes specifically what was said and done, and how the individual members reacted (thoughts and emotions).	Applies theory and concepts to put their own cooperation into perspective.	Analyses the teamwork in an excellent way through both individual and team reflections. Reflects very well on how it felt to give and receive feedback for the individual and how differences in fields of study affected cooperation. Supports the reflections with concrete examples from the teamwork.	Initiates measures (actions) to improve cooperation based on reflections on teamwork situations. Changes patterns of interaction if necessary. Gives reasons for the choice of measures, discusses effects and evaluates the measures in retrospect.
B A very good performance				
C A good performance	Selects teamwork situations and describes the team's actions and reactions more generally.	Applies theory and concepts to explain their own cooperation.	Explains the cooperation well, but with few individual reflections. Reflects on how it felt to give and receive feedback and how differences in fields of study affected cooperation. Reflects on the basis of examples from the teamwork.	Initiates measures (actions) to improve teamwork. To some extent, these are based on reflections on teamwork situations. Changes interactive patterns to some extent if necessary. Describes the measures only.
D A satisfactory performance				
E Meets the minimum requirements	Selects teamwork situations and describes the team's actions and reactions generally and to a small degree.	Is aware of fundamental theory and concepts, but relates this to a limited extent or in general terms to their own cooperation.	Reports the teamwork with few reflections. Reflects to a very limited extent on how it felt to give and receive feedback for the individual and how differences in discipline affected cooperation. Provides very limited support for the reflections with concrete examples from the teamwork.	Initiates measures (actions) to improve teamwork to a very limited extent.
F Fail	Describes the team's activities, but does not select teamwork situations.	Uses theory and concepts with a lack of understanding. Does not relate these to their own cooperation.	Reflects without using their own situation descriptions or other examples from the teamwork as a basis.	Does not initiate measures (actions).

The assessment criteria for the team process report are described in more detail on the following pages. Report writing: The structure of the report, language and references may raise or lower the grade with respect to the grading scale above.

The project report

Grade	Interdisciplinarity in the work	Project presentation
A An excellent performance, clearly outstanding	Evaluates how, as a team, they have applied each team member's academic competence in the work, from the problem formulation to the end result. Clearly shows how the individuals have each expanded their perspective on their own academic learning through interdisciplinary cooperation.	Clearly describes the choice of problem and goals and provides the basis for these. Clearly shows how they are grounded in the village theme. Describes the methods and theories used and justifies the choices well. Provides a clearly structured presentation of the results and discusses this. Reflects on the value of the result to society and discusses how it can provide benefits for others. Explains and discusses how the work can be continued.
B A very good performance		
C A good performance	Describes how, as a team, they have applied each team member's academic competence in the work, from the problem formulation to the end result. Shows to some extent how the individuals have each expanded their perspective on their own academic learning through interdisciplinary cooperation.	Describes the choice of problem formulation and goals and provides the reasons for these to some extent. Shows how they are related to the village theme. Describes the methods and theories used and to some extent provides reasons for the choices. Presents the results and discusses them to some extent. Discusses the value to society of the results and shows how they can provide benefits for others. Suggests how the work could be continued.
D A satisfactory performance	Describes the team members' academic competence, but does not show how they have applied this together as a team. Shows to a very limited extent how the individuals have each expanded their perspective on their own academic learning through interdisciplinary cooperation.	Explains the problem formulation and the goal. Shows to some extent how these are linked with the village theme. Describes the methods and theories used. Provides a presentation of the results and discusses them to a very limited extent. Describes the value to society of the results and indicates to a very limited extent how they could provide benefits for others. Suggests to some extent how the work could be continued.
E Meets the minimum requirements		
F Fail	Does not manage to show that the project report is the result of a joint project. Does not describe the team members' academic competence.	Provides no clear description of the problem formulation or goals. Does not describe the use of methods or theory. Presents the results in a disorganized way.

The assessment criteria for the project report are described in more detail on the following pages. If the village supervisor want to introduce separate requirements for the project report, these must be subject to the assessment criteria above. They must also be expressed in writing so that the second examiner and others know the basis for assessment in case of reassessment of the grade.Report writing: The structure of the report, language and references may raise or lower the grade with respect to the grading scale above.

Explanation of the assessment criteria

The team process report

Specific teamwork situations form the basis for the team process report.

Situations
The intention of EiT is that students develop cooperative skills through reflection on situations that arise during their teamwork. Specific teamwork situations or events form the starting point for the team process report. Choose situations that have been significant, that characterize the team, or

that sparked something that helped the team to progress further. Two to three situations will be enough. If situations are chosen from different stages of the project, together they may be able to show the development in the team's cooperation.

Teamwork situations must be described so that it is clear how each individual influences the teamwork through what they say and do, or do not say and do. For this reason, it is important to mention the team members by name. If the team process report often contains formulations such as "the team decided that" or "the team thought it was a good idea", the dynamics between the individual members are not visible. The use of names in the situation descriptions may make the difference between average and a good performance.

Theory
Experts in Teamwork is a course in which learning is based on the students' own experiences from their cooperation. The role of the theory is to provide a greater understanding of these experiences.

To achieve this, the students discuss their experiences in the light of the theory. In contrast to report writing in many other courses, the process report must not have a separate section describing relevant theories. Theory and concepts are interwoven in the process report where students believe this can provide greater understanding of their own teamwork.

What distinguishes average performance from good performance is the students' discussion and use of the theory

In EiT, students discuss their experiences in the light of theory and use the theory to put their own cooperation into perspective.

to place their teamwork in perspective, rather than only explaining it.

The learning material in the course provides a theoretical foundation, but students are also free to find and use theory beyond this.

Reflections
An important element in the students' learning process in EIT is team-based reflection on the interaction in the team. This reflection involves the team members' thoughts and emotions about as well as their considerations and interpretations of situations when they see it all in retrospect. It also involves asking questions about what they are doing and thinking, and answering these questions with the desire to understand the interaction in the team.

In the team's reflections, it is especially important to analyse

An important element in the students' learning process in EIT is team-based reflection on the interaction in the team. To perform well, the team must bring out the reflections of the individuals on the teamwork situations.

how one's own and others' behavioural patterns and attitudes influence cooperation. The team members improve their understanding of their teamwork by reflecting on aspects such as how they communicate, plan, decide, resolve tasks, handle disagreements and relate to academic, social and personal challenges. Based on the chosen teamwork situations, the team members must discuss whether the way they work together is suitable, and what is needed for the teamwork to function as well as possible.

The team can reflect on different types of situations, both when cooperation is working well and when challenges arise. It may be difficult to reflect on the reasons for good teamwork and to describe how the individual contributes to good teamwork, but this can provide useful insights. It is not

sufficient to state that something is good or challenging; the team must reflect on why it is good or challenging.

Training in giving and receiving feedback is a key aspect of EiT. This can be a good starting point for reflecting on one's own and others' contributions to the team, and the dynamics of the team as a whole. In EiT, students work in inter-disciplinary teams. How academic and cultural differences influenced the teamwork is therefore an aspect that should be included in a process report.

To perform well, the team must identify the individuals' reflections on situations from their teamwork, so that the team's similarities and differences emerge. The reflections of the team should be supported by concrete examples or situations.

Actions

Measures taken by the team to improve cooperation in the project are termed "actions". Actions are initiated based on shared reflections in the team. It is important that the aims of the actions are clear.

- An action might involve changing a pattern of behaviour in the team to improve cooperation. The team changes its pattern of behaviour because of reflection on a situation that has been significant for the team or has been important in other ways.
- An action might also involve keeping and reinforcing

something that works well through conscious choice. The team continues and reinforces an action to encourage cooperation based on an analysis of why the action functions in the team.

The team initiates measures (actions) to improve its teamwork.

Actions can thus start from either positive or negative situations, incidents or sequences of events in the team and are something that the team can practice changing or reinforcing and developing further.

Team members' evaluation of the effect of the actions they initiate and reflection on this in the process report differentiate average performance from good performance.

Reflections on learning outcomes at the end of the teaching period

The report must include a team-based reflection on what the students have learnt as a team when they look back on their

teamwork and what has had particular significance for them.

In addition, the individual members must reflect on what they have learned using the points under *knowledge, skills* and *general competence* in the course description. Each student must start with something that has been significant for him or her in the teamwork and relate it to one or more points. Through reflection on this, the student should indicate something about his or her individual learning outcomes. These reflections may well be written towards the end of the report, and do not need to exceed one page per person.

Tip: Use the Book of Reflections
Experience shows that students often find reflection difficult. The Book of Reflections contains some texts and models that may provide support for students. We therefore encourage you to create an opportunity for students to read different parts of the Book of Reflections in the village.

Student team reading and discussing texts from the Book of Reflections.
Photo: Liliann Eidem

The project report

All the students bring their academic learning into their EiT work. Here, this is symbolized by an old book, a model of a brain, a filter, a questionnaire, laboratory equipment, a dictionary, a robot, sheet music, a stethoscope, a history book and a smartphone. In the project report, the students in each team describe how they have taken advantage of the interdisciplinary breadth in their team in their work on the project. A clear description of all the team members' academic contributions is a prerequisite for a good performance.

Interdisciplinarity in the activities

EiT provides a meeting place for master's students and students from programmes of professional study from the various disciplines at NTNU, enabling them to work together in interdisciplinary teams. Students thus gain valuable experience in cooperation with people who have a different academic background. By using the different academic skills in the team, students can come up with innovative solutions to complex social issues.

In the project report, students must describe how they have used their interdisciplinary breadth in the project work and how each student in the team has contributed with his or her academic competence. A clear description of all the team members' academic contributions is a prerequisite for a good performance.

In addition, the report must include individual reflections from each of the team members on how they have expanded their perspective on their own academic knowledge through the interdisciplinary work. The student should also reflect on how his or her own skills can be communicated and applied better in cooperation with students from different subject areas.

Reflections on how the team's academic differences have influenced the teamwork should be communicated in the process report.

Project presentation

In the project report, the student team must describe the problem formulation and aim of the project work and provide reasons for their choices. The team must also show how the problem formulation is grounded in the village theme. In addition, students must describe the methods and theories used in their work, and provide reasons for their choices. The result must be presented and discussed, and the value to society and further use or possible continuation must be described. In addition, the team must describe how they have taken into account the needs and wishes of different users.

Characteristics of good performance are that the team is clear in its presentation of the problem formulation, methods and results and that the choices made in connection with these are discussed well and explained with reasons. An account of the problem formulation and methods without providing reasons for choosing them is not sufficient for a good performance.

Another prerequisite for good performance is that the team discusses its results and the benefits they may have for society, users and cooperative partners. It is not sufficient for good performance that the team suggests what value the work might have for others or how it could be continued, without this being discussed.

Summary

The report must include a summary of about 200 words describing the project in brief. This must also summarize the team's assessments of the project's value to society and how the project can be continued.

Assessment

The project report and the team process report are assessed based on the grading scale A–F. The team receives one common grade. The project report and the process report are each worth 50 % of the final grade. It is not possible to give individual grades.

Compulsory assignments
The compulsory activities must be approved by the village supervisor before the team can submit the reports for grading, but the oral presentations do not count in the final grade.

Explanation of grades
Individual students are entitled to an explanation of the grade. The student must submit his or her request for an explanation to the village supervisor's faculty within one week after the announcement of the grade. The explanation should normally be given within two weeks after the student requests it. The explanation is provided in writing or orally, according to the village supervisor's choice.

Appeal against a grade
The appeal must be submitted to the village supervisor's faculty no later than three weeks after the announcement of the grade. Complaints about the grading of group work, where a common grade is given, must be sent individually. Any change of grade will only apply to the complainant.

If a request for an explanation has been submitted, the time limit for appeal is three weeks after the explanation has been given.

Quality assurance of teaching

In EiT, there is a culture of observing and providing feedback to each other about the teaching. The focus is on exchanging experiences between the teaching staff members, and the learning assistants receive guidance in the teaching situation. When aspects that are not working well are detected, resources should be allocated, as far as possible, to improve the situation. The overall goal is that all the students will get the same quality of teaching regardless of their village.

Information on experience from all EiT activities is continuously collected during the academic year, and the Head of EiT prepares a combined report on the teaching in EiT at the end of the academic year. Based on experience from the previous academic year, the EiT staff revise the learning material as well as the training and guidance of the teaching staff.

Responsibility for the quality of the teaching
The village supervisor must carry out teaching and assessment in line with the intentions of the course, so that the students' learning outcomes and assessment are consistent for all villages.

The Head of EiT and Head of Department have joint responsibility for following up the quality of the teaching:
- The Head of Department is responsible for ensuring that the village supervisor has the necessary knowledge and skills to provide a basis for a learning environment that provides training in teamwork skills through experience-based learning.
- The Head of Department is responsible for obtaining the resources needed for the course.
- The Head of EiT is responsible for ensuring that the EiT staff prepare learning material and methods, and train and provide guidance to village supervisors and learning assistants.
- The Head of EiT has personnel responsibility for the learning assistants.

Together, the Head of EiT and the village supervisor have the academic responsibility for the teaching in the village:
- The village supervisor has the academic responsibility for the student teams' project work.
- The village supervisor is responsible for following up the student teams' reflections, and providing guidance for the writing of the process report.
- The village supervisor is responsible for conducting reference group meetings in the village.
- The village supervisor is responsible for conducting a course evaluation; see NTNU's system for quality assurance of education.
- The Head of EiT has the academic responsibility for the experience-based teaching methods for development of teamwork skills.

The programme of study or department can set the criteria for the village theme.

Reference group and reference group meeting

The reference group meeting may well be conducted as a dialogue between the village supervisor and the students in the village. It is an opportunity for students to provide feedback on the learning activities, the exchange of information, the indoor climate in the village room, whether the village supervisor has been available, the learning assistants' contribution to the students' reflection on the interaction, the learning material and the cooperation with external partners.

In all villages, feedback must be obtained from the students through reference groups, according to NTNU's system for quality assurance of education. The village supervisor is responsible for creating a reference group in the village. A representative for each student team and the village leader must participate. In addition, the learning assistants, the teaching assistant, a representative from the department/faculty and a representative from the EiT staff can be invited to participate. The reference group must submit proposals for measures to improve students' learning outcomes in EiT.

Implementation of the reference group meeting

At least one reference group meeting must be held during the semester or intensive period.

Suggested procedure:
1. Each student team chooses one reference group representative.
2. Time is allocated in the village plan (about 20 minutes) in which the teams discuss what they want to take up in the reference group meetings. The reference group representative takes notes. Feel free to distribute the list of suggested topics for the reference group meetings so that students have an opportunity to prepare their feedback.
3. The village supervisor and other people, if applicable, hold a meeting with the reference group representatives. Each representative presents views from his or her team.

EiT reference group report

After the reference group meeting, the village supervisor is responsible for ensuring that a form is completed (EiT reference group report), which everybody signs. The focus of the report should be on constructive feedback based on the relationship between the learning outcomes and learning activities in the village. The report must deal with the quality of the teaching and suggestions for actions. If aspects of the village are not working well, resources should be allocated, as far as possible, to improve the situation.

For this reason, the head of EiT should be kept informed continuously. The report must be sent to the village supervisor's department and the Head of EiT.

Examples of questions:
- How is the indoor climate in the village room (size, air quality, lighting, noise, fittings and furniture, etc.)?
- Are the expected learning outcomes in EiT communicated effectively?
- Have the times for attendance and plans for the village been communicated clearly enough?
- Are the learning activities appropriate to the learning outcomes expected from the course?
- Is the village supervisor available for guidance when the students need this?
- Have the learning assistants contributed to increased reflection on the interaction in the team?
- Does the learning material support learning?
- If the village has external partners: how is the cooperation working?

Calendars

Semester-based villages

Date	Activity
8 January 2020	1st village day
15 January 2020	2nd village day (NB: On this date, the village supervisor must send his or her faculty a list of students who have not attended the first two village days.)
22 January 2020	3rd village day
29 January 2020	4th village day
5 February 2020	5th village day
12 February 2020	6th village day
19 February 2020	7th village day
26 February 2020	8th village day
4 March 2020	9th village day
11 March 2020	10th village day
18 March 2020	11th village day
25 March 2020	12th village day
1 April 2020	13th village day
15 April 2020	14th village day
22 April 2020	15th village day
29 April 2020	Deadline for students to submit their project reports and process reports
12 May 2020	Assessment meeting in Trondheim
13 May 2020	Assessment meeting in Ålesund
14 May 2020	Assessment meeting in Gjøvik
22 May 2020	Deadline for grading

Intensive villages

Date	Activity
6 January 2020	1st village day
7 January 2020	2nd village day (NB: On this date, the village supervisor must send his or her faculty a list of students who have not attended the first two village days.)
8 January 2020	3rd village day
9 January 2020	4th village day
10 January 2020	5th village day
13 January 2020	6th village day
14 January 2020	7th village day
15 January 2020	8th village day
16 January 2020	9th village day
17 January 2020	10th village day
20 January 2020	11th village day
21 January 2020	12th village day
22 January 2020	13th village day
23 January 2020	14th village day
24 January 2020	15th village day
31 January 2020	Deadline for students to submit their project reports and process reports
11 February 2020	Assessment meeting in Trondheim
21 February 2020	Deadline for grading

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