

The Planning Bus (Planbussen): Problem-, Project-, and Practice-Based Learning (P3BL)

Autobus za planiranje (Planbussen):
učenje zasnovano na problemima, projektima i praksi (P3BL)

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Abstract Planbussen is a master-level course in local development and planning offered within the five-year Master of Architecture program at the Department of Architecture and Planning. It focuses on planning challenges in smaller towns and rural municipalities, emphasizing the need for proactive development strategies. Conducted in collaboration with 2–3 municipalities each year, Planbussen is rooted in practice-based fieldwork and real-world problem solving. The course aims to enhance students' planning competence while exploring the educational value and societal relevance of problem-, project-, and practice-based learning in architecture and planning education.

Keywords societal relevance; problem-based learning; project-based learning; practice-based learning.

Sažetak Planbussen je master-kurs iz oblasti lokalnog razvoja i planiranja ponuđen u okviru petogodišnjeg Master programa arhitekture na Odsjeku za arhitekturu i planiranje. Fokusira se na izazove planiranja u manjim gradovima i ruralnim općinama, naglašavajući potrebu za proaktivnim razvojnim strategijama. Sprovodeći se u saradnji sa dvije do tri općine svake godine, Planbussen je zasnovan na praktičnom terenskom radu i rješavanju stvarnih problema. Cilj kursa jeste da unaprijedi studentske kompetencije u planiranju dok istražuje obrazovnu vrijednost i društvenu relevantnost učenja zasnovanog na problemima, projektima i praksi u obrazovanju iz arhitekture i planiranja.

Ključne riječi društvena relevantnost; učenje zasnovano na problemima; učenje zasnovano na projektima; učenje zasnovano na praksi.

1 Introduction and Background

1.1 What is The Planning Bus (Planbussen)?

The Planning Bus, from now on in this text called "Planbussen" is a master-level course in local development and planning within the five-year Master of Architecture program, offered by the Department of Architecture and Planning at our university. The course consists of an elective project module worth 15 ECTS credits, in conjunction with a related theoretical module worth 7.5 ECTS credits and is open to all architecture students in their fourth and fifth years (master's level). The goal of the course is to enhance architecture students' planning competence, with a particular focus on the development and planning of smaller towns and settlements, where the challenges often differ significantly from those found in larger cities and urban areas (for example, municipalities in rural areas often need to actively drive development rather than just manage it (Cruikshank, 2018)). The course runs throughout the spring semester, starting in mid-February and concluding

with the final project submission (exam) around May–June. Since 2022, the course has been conducted with groups of 8–13 students, and each year involves direct collaboration with 2–3 municipalities and their towns, which become the project areas students work with.

The main idea behind the course is to give students the opportunity, during their studies, to engage with and be exposed to current and real-world issues and challenges faced by Norwegian municipalities and towns. It is largely based on practice-oriented fieldwork, where the testing and application of theory and methods in real-world situations is a key component. Based on this course (Planbussen), we aim to explore what types of learning and knowledge are enabled through problem-, project-, and practice-based teaching, and what this approach can offer academia and other stakeholders. In addition, we ask whether there is potential for greater impact and societal relevance in higher education teaching. Before delving into these questions, we will outline the academic conditions and circumstances under which the course was originally created, and how this can be viewed in light of contemporary teaching in the fields of architecture and planning.

1.2 A Planning Background: The Forgotten Settlements

Planbussen was originally a planning course initiated and led by a former employee, now Associate Professor at the Department. The course emerged as a reaction to the lack of emphasis at the time on the physical qualities and environments in the planning and development of Norwegian towns — both within educational institutions and in professional practice. The course and the student projects were primarily focused on land-use planning and physical design responses (architecture and design), and we would argue that they largely fulfilled many of the wishes and guidelines set forth by the collaborating municipalities involved.

One of the main intentions behind the course was to highlight and bring attention to the absence of architectural and planning-related themes, needs, and perspectives in contemporary Norwegian municipal planning — and to shed light on the potential consequences this neglect could have on ongoing local development. Despite strong engagement from instructors, students, and municipalities, the course was discontinued in 2009. Without speculating on the reasons for its discontinuation, it is fair to say that the circumstances and the need for a stronger focus on local development and planning in Norwegian towns remained just as critical in 2009 as they were when the course was first introduced in 2003.

When compared to the current situation, the academic conditions and the state of development and planning in Norwegian towns remain largely unchanged — and one could only wish and hope that more progress and transformation in the field had been seen by now.

1.3 The Need for Increased Public Planning Competence

Although there may not have been major changes in practice, the need for increased efforts in Norwegian local development and planning competence has been widely discussed over the past ten years and has been raised high on the agenda — both politically and within educational institutions. In 2014, a major survey was conducted on behalf of KS (the Norwegian Association of Local and Regional Authorities) to assess municipalities' available planning competence. The results showed that two out of three municipalities reported having less than half a full-time position dedicated to spatial planning, while as many as nine out of ten stated that they to varying degrees rely on external consultants as part of their planning work (NIVI, 2014).

As a result, the "Forum for Education in Societal Planning" (FUS) and KS, in collaboration with the Ministry of Local Government and Modernisation (KMD), published the strategic document "How to Increase Educational Capacity in Public Planning?" in 2019. This document set the goal of both educating more planners and strengthening general planning competence — among other things, by expanding architecture education (Grønning & Aarsæther, 2019).

This was one of several contributing factors behind the decision, during the pandemic, to allocate 20 additional study places to the five-year Master of Architecture program and 20 places to the two-year

Master's in Physical Planning at our university. This was a combined effort to provide more study opportunities for students affected by the pandemic while also boosting planning competence in Norway (in line with the strategy document). However, after the pandemic, these additional study places were withdrawn, and the previously stated commitment to increasing educational capacity in Norwegian public planning appears to have partially faded away.

2 Education and Teaching

2.1 Urban vs. Rural Focus

But the responsibility does not lie with politicians and government ministries alone — educational institutions also bear responsibility and have room to act, not only in terms of who or how many are educated, but also in how and with what content they are educated. Today, nearly half of all architects in Norway are educated at our university, and as a "producer of future planners," we have a clear and significant societal responsibility.

The lack of capacity in public planning is not solely due to too few architects and planners being graduated, but is also a consequence of what has historically been the focus of the educational programs. For a long time, there has been a divide between urban and rural contexts within the architecture and planning professions, which over the past century have maintained a clear urban orientation and focus (Frank & Reiss, 2014). That many municipalities — especially the smaller ones in rural districts — struggle to attract the right expertise must therefore be seen in light of the fact that municipal work has not sufficiently been presented as a viable or attractive career path for many architects and planners, who have long preferred urban design projects. This has, in turn, led to rural perspectives and considerations being partially forgotten, deprioritized, or under-communicated.

Of course, not everyone falls into this pattern. There are many who have worked to promote alternative perspectives beyond purely urban ones, and Norway does have several dedicated planning programs. However, the architecture profession appears to have been somewhat slower to respond, and while municipalities have long called for the necessary expertise, educational programs are only now beginning to respond.

Although the need for and focus on local development and small-town challenges have increased in recent years, the solution is not necessarily as simple as transferring urban theories and methods to rural contexts. Norwegian planning theorist Jørn Cruickshank is among those who question whether our existing (urban) theories are even suitable or appropriate for the situations and challenges that today's (rural) towns and communities face (Cruickshank, 2018). While Planbussen alone may not be capable of producing entirely new (rural) theories and methods, it can at the very least expand the range of perspectives and approaches available to Norwegian planning and local development — and perhaps especially within architecture education.

2.2 Problem-Based Learning in Architecture and Planning

Like other profession-based programs at the university and college level, architecture and planning are situated somewhere between theory and practice — two aspects that are often presented as opposites, where one is emphasized and favored at the expense of the other. The criticism typically goes that theory-heavy perspectives are too detached from reality, idealistic, and lacking grounding, while practice-oriented approaches fail to contribute to further theorization and research, merely reacting to what is rather than exploring what could be.

The pedagogical stance in Planbussen is not to prioritize either practice-based or theory-based learning and teaching over the other, but rather to recognize that both have their relevance and rightful place in education and academia, and must be used and understood in interplay with one another. Without a connection to practice, the gap between education and reality can grow significantly, and without theoretical perspectives, both practitioners and students may struggle to understand and position themselves and their work within a broader academic and theoretical context.

In teaching, problem-based learning (PBL) — which was introduced around the turn of the millennium — has become a recognized and widely used method. PBL seeks precisely to create a link between theory and practice, where students are exposed to an abstracted form of reality, intended to better prepare them to handle similar issues later in their professional careers (Salihović et al., 2016).

2.3 Studio Culture and "Community of Practice"

This form of teaching (PBL) is strikingly similar to the project- and studio-based culture that has long been the dominant mode of instruction within architecture and planning education, where students are given projects and assignment briefs intended to represent the types of challenges and situations they may encounter in professional practice, while also allowing room to develop, theorize, and reflect on their own formation and discipline.

However, this form of "studio teaching" has also been criticized for being too dependent on and limited by the experiences, perspectives, and attitudes of the instructor or course leader. This means that the selected themes, pedagogical approaches, and assignments often fail to respond adequately to contemporary changes and developments, and instead become reproductions of previously known tasks, themes, and methods (Crabbe et al., 2022). There are, of course, exceptions, but these are often dependent on individual initiative and require a greater degree of professional or pedagogical engagement (which, unfortunately, is not always present). By starting from a real situation, the framework and direction are instead shaped by what is actually happening and evolving in the field, not solely by the instructor's or institution's perspective, awareness, or overview.

A particularly important and positive aspect of studio culture, where students work alone or in groups within the same space, hall, or studio, is what Etienne Wenger refers

to as a "community of practice," where students not only learn from what they themselves do but also from what their peers do and produce (Wenger, 1998). However, for this to become more than just a random form of learning — dependent on chance — it must not remain a latent and incidental element of the teaching.

It is not enough for the student group to simply possess diverse skills and knowledge and be working on different things; they must be challenged and encouraged to actively learn from one another and share their experiences through structured teaching activities. In Planbussen, this is achieved through extensive use of peer evaluation and feedback, student presentations and idea workshops, shared tasks across project groups, and facilitated guidance sessions that also address group dynamics. In this way, students' unique qualities and experiences are recognized and highlighted, and they learn to support one another while finding confidence in areas where they have control and feel a sense of mastery. In our view, it is not enough for instructors — and ideally the students as well — to merely have an awareness of pedagogy and education; it must also become an active part of the teaching process.

2.4 Project- and Practice-Based Learning in Planbussen

In Planbussen, we aim to take these established teaching and learning concepts (PBL and "community of practice") a step further — away from the normative frameworks typically set by studio- and lecture-based teaching. As a learning activity, Planbussen combines problem-based and project-based education and applies them to a real place and a current context. This enables the practical application of (theoretical) knowledge, where students also receive direct feedback and reactions from instructors, the municipality, and residents throughout the process.

Rather than presenting students with a simplified version of reality, we allow the place itself to define the framework and starting point for the projects and problems students will work on — with all its unique facets, challenges, qualities, and possible approaches. This results in somewhat less predictability, control, and oversight, but at the same time more accurately represents the reality and practice that students will eventually have to face.

Learning and project work therefore take place not only within the confines of a studio or drawing room but in situ — on-site through fieldwork — based on the real conditions and challenges of the place. In this way, students cannot choose to relate only to a simplified, pre-defined description of what is relevant or real (as defined in an assignment brief), but must instead reflect and engage in dialogue with the municipality and local residents to determine what kinds of input, answers, and investigations are needed.

To do this, the students must apply previously acquired knowledge, theory, understanding, and competence in what for most is a new and unfamiliar environment. In this sense, students are not merely asked to respond to a pre-defined question but must also participate in identifying which questions and topics are relevant for the specific situation, and how their profession can contribute to it.

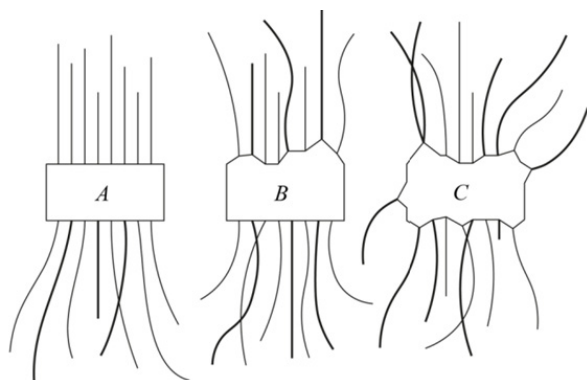


Figure 1 A - Example of a static and streamlined educational institution. B - Institution that partially adapts to and responds to the students. C - A dynamic interaction and exchange between the educational institution, the outside world, the instructors, and the students. Source: Based on figures originally published by Burazor & Schwai, 2018 and Archipovaite et al., 2016.

In doing so, students are given the opportunity to shape and influence their own assignment, teaching, and education (Figure 1). We believe that this approach makes the education, course, and teaching more realistic and relevant — and there are cases where student projects have led to actual measures and investments by the municipality.

2 The Planning Bus (Planbussen) in Practice

3.1 Planbussen in 2021

The educational initiative "Planbussen," in its current form, was revived in the fall of 2021 as an effort to address the previously mentioned lack of emphasis on rural topics and local challenges within the architecture education at our university (see section 1.4). The immediate trigger was a request from a municipality that wanted to collaborate with the architecture program, which rekindled the idea and opportunity to restart the course.

Compared to its original version in the 2000s, the current course still focuses primarily on the relationship between planning (land use) and architecture (physical environments), but it also acknowledges that social, ecological, and economic perspectives must be included as part of a holistic approach to local development and planning.

With the understanding that we still do not have all the answers or solutions to the challenges posed by the ongoing nature and climate crisis, Planbussen aims to approach each location and assignment with a clean slate, setting few guidelines or expectations for which themes or perspectives should be addressed — or what can or cannot be part of the student projects delivered at the end of the semester. The goal is to uncover new or different questions and answers, rather than simply reconstruct what is already known.

This requires that we, the municipalities, and the students all accept that it is not predetermined what the

students and the course will work on, and that the format of the projects may not necessarily conform to the typical normative architectural or planning formats commonly found in education and practice (which we view as a form of necessary academic freedom).

From a pedagogical perspective, this means students must be conscious of and take an active role in their own education and learning. This is supported through the course's general learning activities and specific reflection assignments, where students are asked to reflect on and evaluate their completed activities, group dynamics, choices and use of various tools and methods, as well as discussions of overarching topics related to architectural, planning, urban, rural, social, and sustainability-related perspectives.

3.2 Collaboration with Municipalities

Since 2021, Planbussen has visited and collaborated with 9 municipalities and towns in the counties of Trøndelag and Innlandet (as of summer 2025). The smallest place had just under 200 residents — below the formal definition of a town — while the largest had around 10,000 inhabitants. The selection of potential partner municipalities and towns is based on a combination of their size, practical considerations (such as travel distance, administrative capacity, accommodations, etc.), academic factors (such as variation and composition of locations), and a mutual understanding between us and the municipality regarding the opportunities and limitations such an academic collaboration entails.

This includes, among other things, that we as instructors cannot (and do not wish to) guarantee what will be delivered at the end (beyond formal requirements), or what the students choose to work on. Instead, we aim primarily to address the issues we identify and find relevant.

In the fall of 2021, we sent a request for collaboration to around 30 municipalities, one-third of which responded positively right away. Since then, we have mostly continued working with those respondents without needing to find new partners. We have also seen growing awareness and interest among municipalities regarding Planbussen as a possible initiative, which has led to a few new inquiries.

The experience from these collaborations has generally been positive, and we find that the motivation and drive are strong among many municipalities — even in times of tighter budgets and poor forecasts. Feedback after completed collaborations has been unanimously positive, and Planbussen appears to offer something that municipalities recognize and value.

In addition to being open and willing to collaborate, municipalities must also be able to provide financial support for the implementation of the course. Given the significant budget cuts and reductions in the higher education sector in recent years, this support has been crucial in making it possible to conduct Planbussen in line with the academic and pedagogical goals we uphold. In return, the municipalities receive access to the students' ideas and input and are sent the final project materials at the end of the semester (both in physical and digital form). All student projects are also published on the website www.planbussen.no.

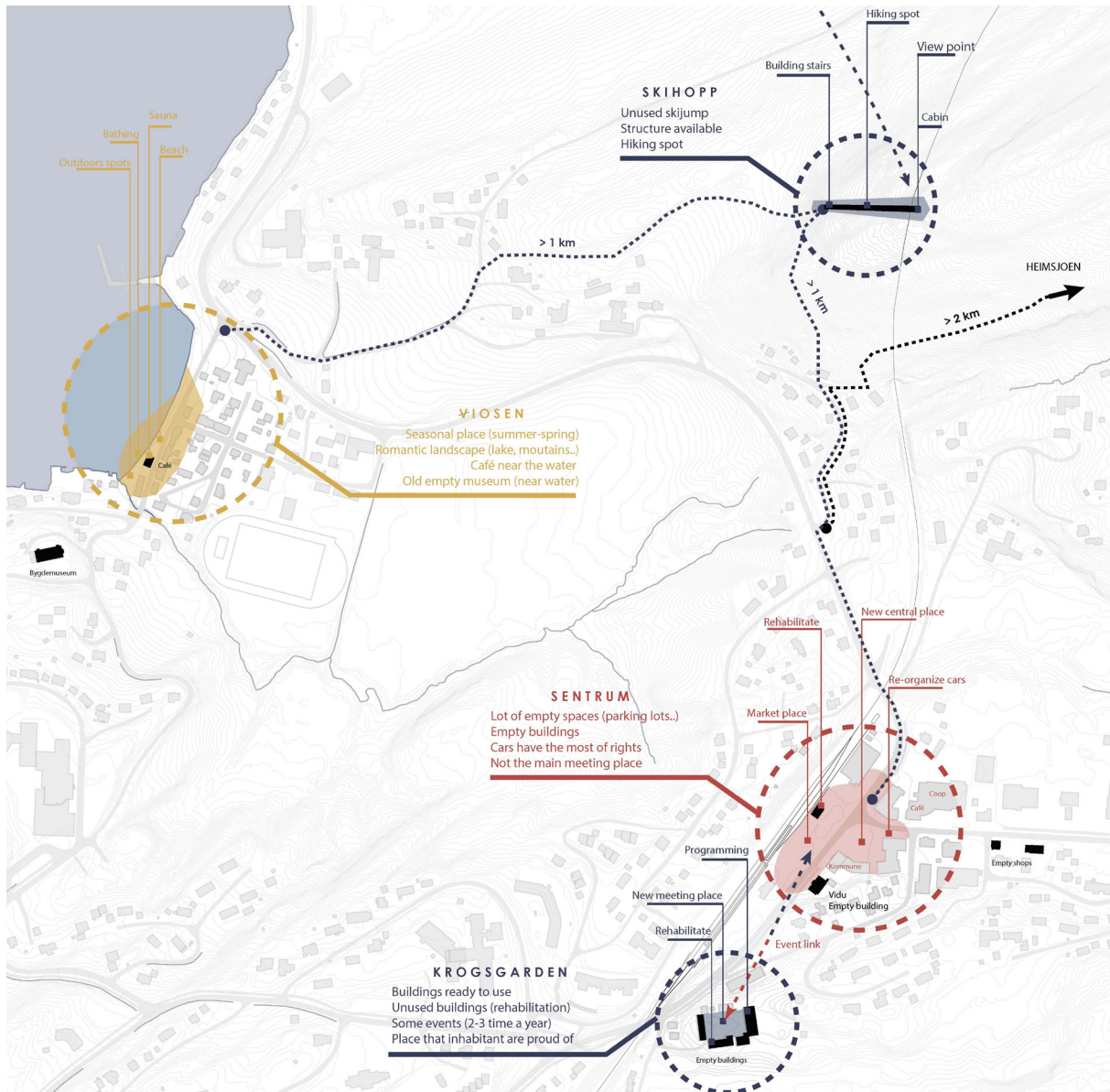


Figure 2 Project example that incorporates elements of planning, strategy, architectural projects, and other interventions. Source: Matthias Guillois & Nolwenn Jobard-Houdusse, Planbussen, 2023.

3.3 Fieldwork, Interaction, and Place Understanding

During a semester, we typically visit 2 to 3 municipalities and towns. We do this to offer and expose students to a range of variations in terms of geography, topography, industries, economy, nature, population, culture, social conditions, size, density, and more. This also allows students to explore and work with different themes and perspectives, thereby expanding their own repertoire and competence.

The semester begins with an initial preparatory phase, where students attempt to map, describe, and analyze the place remotely — a form of distance investigation and understanding. The students' first physical encounter and interaction with the site takes place through fieldwork, which usually occurs within the first two months of the semester. These visits last between 2–6 days, and the goal is for students to complete both a week-long stay at one location and a second visit to another place in the form of two shorter

stays spaced a few weeks apart. This allows students to experience and understand the difference between engaging with a place and its context at varying depths and durations.

In advance, students must themselves (with guidance) plan how they intend to investigate and interact with the place and its local population. What can they find out beforehand? What is only possible to discover on-site? How is the place presented externally? What do they expect to find or uncover? In addition, they must assess and understand the wishes and perspectives presented by the municipality and try to identify the underlying intentions, whom they represent, and whether there are alternative or overlooked themes that have been forgotten or under-communicated.

Each fieldwork visit concludes with a public town meeting, where the students present and exhibit their initial ideas and project drafts and receive direct feedback and reactions from local politicians, administrators, and residents. This gives the students a final reality check and



Figure 3 The students' first encounter with the place, where they are given a tour by the municipal planner. Source: Authors, 2023.



Figure 4 The students present their project drafts at a public town meeting at the end of the fieldwork. Source: Authors, 2024.



Figure 5 Interaction between students and residents outside the local grocery store. A model, drawings, a prize wheel, and a questionnaire are used to initiate contact and dialogue. Source: Authors, 2022.



Figure 6 Final presentation and exhibition of the completed projects at the end of the semester. Source: Authors, 2022.

adjustment of their work before returning to the studio to continue developing their projects for the remainder of the semester.

Although most of the interaction and communication with the local population takes place during the fieldwork, the public meeting also serves as a potential arena to connect with key local figures, dedicated community members, and informants who can provide invaluable insights and input for further project development.

To prevent students from merely reacting to the existing conditions of the place without aspiring toward more utopian future visions, they are assigned specific tasks throughout the course that encourage them to break free from current constraints and imagine what might be possible beyond today's limitations. They are also tasked with discussing and understanding the places in a broader regional and global context — before, during, and after the fieldwork — to help reframe the places in relation to wider issues.

For many of the exchange students, who often come from larger European cities, the contrast with small Norwegian towns can be significant. While this can pose challenges for some, it also brings valuable new perspectives and ways of seeing Norwegian local development.

3.4 Starting from the Place

The problems and challenges presented to the students are rooted in the place and the actual situation, and much of the learning takes place while we are out in the field (in-situ) — something that few of the students have prior experience with from their earlier studies. By working in and on the site, students are given the opportunity not only to apply and test the content, validity, and usefulness of previously acquired theory and knowledge, but also to develop and experiment with new methods, tools, and experiences.

The goal is for "theory to meet reality," meaning that previously acquired knowledge and theory are to be given a time-specific and contextual application and understanding. By interacting with and meeting the residents of the area (in the form of politicians, municipal employees, business owners, developers, people outside shops, at schools, in neighborhoods, etc.), students are also given the opportunity to test the validity of their prior assumptions and perceptions in a way that is difficult to replicate in a typical classroom setting.

This rarely happens as a linear process and is something that repeats itself throughout the semester and the duration of the project. The close dialogue with the local population also allows students to receive immediate

reactions and feedback on the initiatives and projects they propose: Do people recognize themselves in them? Do they address the actual needs? Is it something that has been tried before? Are there any groups or individuals they should talk to or make sure to include?

For this to be possible, students must be able to present and discuss their discipline and projects with non-experts, become skilled in participatory processes, succeed in generating engagement and understanding, and be able both to grasp and convey how planning, architecture, and the built environment affect and matter to individuals.

3.5 Contextual Deepening

Even though the fieldwork may last for about a week, and the places being studied rarely have more than 2,000 inhabitants, this is not sufficient for students to dive into and address all the potentially relevant aspects, perspectives, or themes. The places and situations are simply too complex, and the available resources and time are too limited. Achieving a "complete immersion and understanding of the place" is neither possible nor an explicit goal of the fieldwork.

The intention is for students to be exposed to something real — a new and unfamiliar context — and to meet, discuss, communicate with, and receive feedback from people who both live in and constitute the context they are working with. In this way, the discovery and selection of what is considered relevant topics and perspectives

happens only after the students become familiar with the actual situation. The simplification or "reduction of reality" then becomes more a matter of clarifying what they want to focus on, rather than a limitation of what it is possible to work with.

As previously mentioned, "predefined reductions of reality" are quite common in other forms of project- and studio-based teaching, and this type of reduction and simplification of context and situation is something we are critical of (see section 2.4). We believe it should, to a greater extent, be up to the students themselves (under guidance and in collaboration with instructors, the municipality, and the local community) to take on the themes and aspects they either find interesting or recognize as underexplored.

Our experience suggests that students' learning, sense of mastery, and overall satisfaction improve when they find and pursue a personal engagement in the work. We also observe a tendency for the projects and the answers they produce to be better, more numerous, and more precise when students get to work on something they are genuinely passionate about — based on the place's own conditions (within the context of architecture, planning, and local development).

3.6 Final Projects

At the end of the semester, students submit their projects for evaluation, where they are presented to and assessed by an external examiner — either a



Figure 7 Rethinking Orkanger, a master plan summarizing the intended area development. Source: Arianna Canini & Mathilde Illtis, Planbussen, 2025.

USING THE URBAN TOOLBOX

ADAPTING THE TOOLS TO ORKANGER

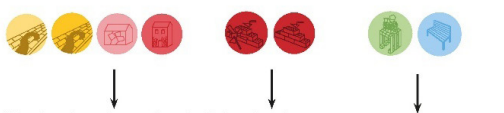
A) Getting inspiration from the local context



B) Findings



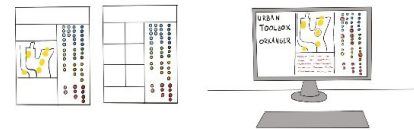
C) Incorporating it to the tools



D) Getting local producers/products involved



GETTING PEOPLE INVOLVED



1. Adapting Participation forms

The municipality adapts the two participation forms seen before: the 'Area and Tools Form' (used in Step 2) and the 'Feedback and Selection Form' (used in Step 3).



2. Identifying the Area and its Needs

The municipality publishes the 'Area and Tools Form' online and in a newspaper, inviting residents to select one of the designated areas for improvement and suggest which toolbox tools they believe would be most suitable and secure their ideas.



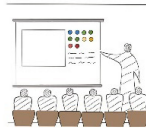
3. Community Workshop

The municipality invites local architects or architecture students to host a workshop where residents are invited to share their thoughts, ideas, and hopes for the selected area.



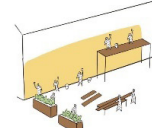
4. Developing Proposals

The architects then develop a project proposal for the chosen area based on input from the workshop and using tools from the Urban Toolbox.



5. Public review and Selection

The architect presents the proposals at a public event, where residents can select their favourite project and give feedback using the 'Feedback and Selection Form'. The proposals are also made available online for those who can't attend physically.



6. Planning and implementation

The municipality carries out the selected project planning, including sourcing local materials and collaborators to realize the selected toolbox items. Implementation can be done over the community through design, youth summer jobs, or support from NAV.

Figure 8 City centre revival – using urban toolbox, Visualizing a systematic solution to common planning problems engaging inhabitants. Source: Jenny Fjeldström Jensen and Rasa Petrosiute, Planbussen, 2025.

practicing architect or planner with experience in the field. In this way, the projects are not only evaluated in light of their specific situation and context but also from a professional and academic perspective. At the same time, the academic validity and applicability of the course itself are assessed.

In addition to this, we also return to the municipalities and places we have worked with, where the projects are presented and exhibited at a public town meeting. Here, the local residents and the municipality once again have the opportunity to share their evaluations and feedback on the projects. The meeting also becomes a potential arena for open discussion and exchange of opinions about the community's future and development.

Beyond providing the town and municipality with new input and solutions in the form of student projects, Planbussen as an activity can also have a positive impact on the place and its people. By spending time and resources on the town and its community, we acknowledge that it has value and relevance. Through physical presence and interaction with the local population, we also demonstrate that we are genuinely interested in (and dependent on) understanding their experiences, opinions, and perspectives.

Throughout the fieldwork and project period, both we and the students aim to highlight the place's existing and potential qualities, rather than simply pointing out possible problems and challenges. This is because we believe that creation, development, and change happen best through shared engagement and understanding – rather than by focusing on the obstacles along the way.

4 Conclusion

4.1 Reflections

After three rounds of Planbussen, we are left with a number of thoughts, reflections, and opinions on various topics – such as theory versus practice, the relationship between pedagogy and subject matter, and the potential relevance and application of a problem-, project-, and practice-based course, both within and beyond academia. But before delving into these themes, we will attempt to answer the questions we posed at the beginning of this text: What kind of learning and knowledge does a problem-, project-, and practice-based approach enable, and what can it offer academia and other stakeholders? And is there a potential for greater impact and societal relevance in higher education?

Based on our own experiences with Planbussen, we believe there is much to gain from such a problem-, project-, and practice-based course. The actual combination of theory and practice not only offers potential added value for educators and students, but can also be of direct benefit and interest to other stakeholders – such as municipalities, local businesses, civic organizations, residents, and practitioners in architecture and planning.

As an educational institution, we possess significant resources in the form of accumulated knowledge and expertise, which we have a responsibility to apply and manage in a meaningful way. Parts of this are already made available through research and larger projects, but we believe there is significant untapped potential for the

PRESTEIGEN ELEVATOR

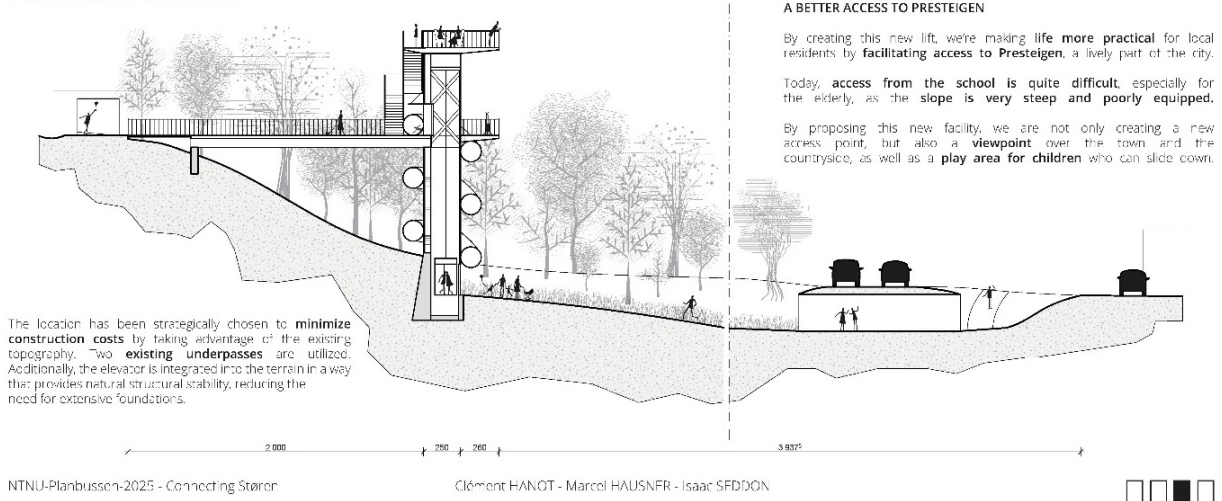


Figure 9 Connecting Støren, Proposes one architectonic design solution. Source: Clement Hanot, Marcel Hausner and Isaac Seddon, Planbussen, 2025.

educational programs and courses themselves to have a greater involvement and impact on society — beyond just producing and graduating new professionals.

By combining theory and practice during the course of their studies, we believe students become more aware of what they are preparing for after graduation, and are better able to see and understand what their education should or could provide in terms of necessary knowledge, tools, and competence. Allowing students to work on real problems and challenges — under guidance and within "safe boundaries" — also makes each student more confident in themselves and better equipped to make a real difference after completing their education.

We do not believe the approach used in Planbussen is necessarily a one-size-fits-all solution, but we do think it can serve as an example of what is possible in terms of external collaboration and societal relevance, even within the context of teaching.

In addition to this, we wish to repeat and emphasize the following points from the text, which we believe should form the foundation for most teaching at college and university level:

- Students should have greater influence over their own teaching, education, and learning. This leads to increased motivation through personal interest, but also opens up for new perspectives and contributions to the teaching.
- Peer learning ("community of practice") can play an invaluable role in education and student learning outcomes, but must be used deliberately and actively rather than remaining a passive element. This enables increased learning, even from fields not necessarily covered by the course curriculum or instructors. By incorporating learning and input from the emerging "learning community" that develops among students, residents, municipal staff, and local enthusiasts, peer learning is enabled — for students, teachers, and the local community alike (Wenger, 1998).
- Students' other knowledge, skills, and experiences should be more actively acknowledged in teaching. Many students can contribute expertise from other disciplines and areas of interest, which can broaden and enrich the

possible understanding of the problems and approaches within a project. This carries the implicit recognition that it is not only instructors who can contribute new knowledge and learning to students — the exchange can also go the other way. *"The distinction between being a student and being a teacher is possibly one of the most arbitrary distinctions which an educational institution can impose upon its inmates."* (Canter, 1977, p. vi).

- Rather than focusing on teaching our students answers and solutions in the form of knowledge, we must increasingly provide them with the right tools, methods, and experiences that equip them to identify the right questions — before they begin looking for possible solutions and opportunities for tomorrow's challenges. Today's and tomorrow's complex and unruly problems may not necessarily require answers and solutions we already know. To meet these, students must develop critical reflection skills and a high degree of independence, openness, and communication. These conditions foster opportunities for student-driven learning.

- Theory should always meet practice. *"A profession not only has a practice, but a theory of action, in which that practice can become a reproducible, valid technique."* (Argyris & Schön, 1992; Till, 1996). Theory alone will never truly compare to actually engaging with the problems, the place, and the people who live there. Rather than abstracting reality, students must be trained to navigate complexity and unpredictability, and to develop a local understanding of a place — without necessarily having to live there for an extended time or become an integrated part of the local community. Additionally, there is important value in not only learning from one's own knowledge, but also from dialogue and interaction with people from the place (who possess a kind of "reality key") (Burazor & Schwai, 2018).

- By developing a local understanding of the place's challenges and opportunities, students are also able to highlight and learn about alternative, diverse, and new contributions to the sustainability debate. These contributions are not limited to the built environment, but also address economic, social, and political realities

— such as behavior, ownership structures, cultural and historical conditions, local democracy, and more.

- Planbussen and the students' presence and activity on site in itself can lead to change and spark new thinking among the local population. The students' development of contextual projects in collaboration with the local community results in projects with a higher degree of usability and potential for implementation.

4.2 Selected Excerpts from Student Projects

To showcase the variation of students approaches, both regarding content and method, we have selected three excerpts (Figure 7-9), which we briefly comment. We try to visualize the span in approach from master plan (Figure 7), strategic solution (Figure 8) to project development (Figure 9). Entrance point for all students and their approaches is the same, always framed by political realities, local particularities and inhabitants participation and input.

The project "Rethinking Orkanger" (Figure 7) presents a summary of their proposed actions in an overall masterplan, which is near the normative way of communication area development ideas. In the project "City centre revival – using urban toolbox" (Figure 8)

the students propose a systematic solution to common planning problems engaging inhabitants. They gather best practice projects and categorize them, suggesting use in Orkanger, encouraging the inclusion of relevant stakeholders. The last of the presented student project, "Connecting Støren" (Figure 9), proposes a project driven development solution, through one architectural design, solving infrastructure and connectivity.

4.3 Thoughts for the Future

Our hope for the future of Planbussen is that we can continue its pedagogical and academic development, and thus contribute positively and actively to the university, the discipline, and society at large (while acknowledging that the course itself constitutes a relatively small part of the bigger picture). In the time ahead, our goal is to continue developing and testing various pedagogical and academic tools and methods, expand our geographic context and areas of work, and hopefully establish more collaborations with new municipalities, towns, and other disciplines at university. You can follow this – and hopefully other outcomes from Planbussen – via the website: www.planbussen.no.

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