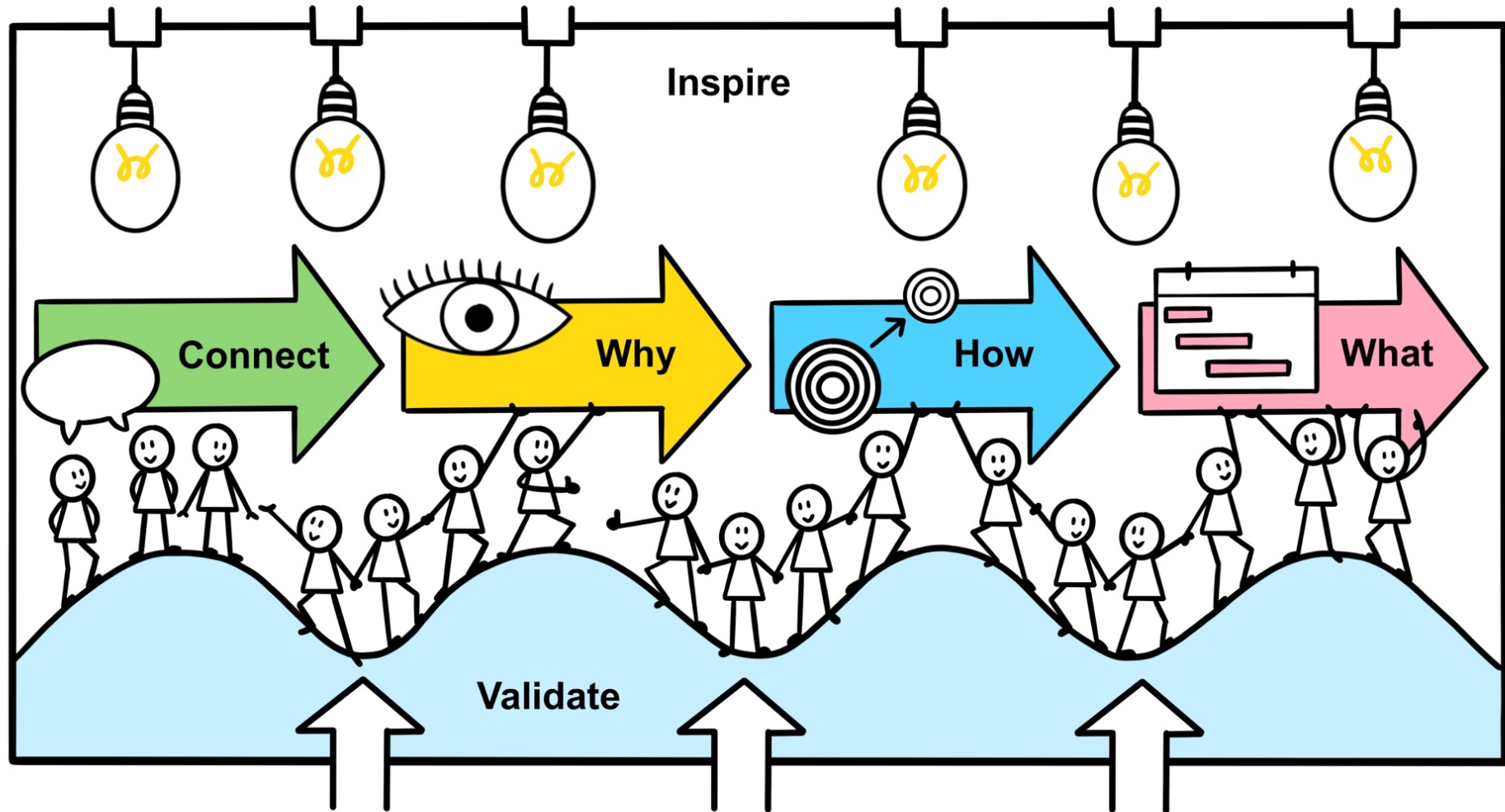


“We’re building a school!”

The Art of Participation in Schoolbuilding



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INTRODUCTION

Idea for this handbook

Educational architecture is a young field of architecture closely linked to the participation of all those who learn and work in schools. Until recently, pioneers in the EU were the Netherlands, Scandinavia, and Portugal. In these countries, various forms of participation have developed over the last 25 years, and involving users in schoolbuilding has become commonplace. However, the knowledge, procedures, and processes gained have, at best, been published only in the national languages. Now that Germany, Austria, Italy and Switzerland have also embarked on involving users in schoolbuilding processes, it makes sense to learn from the experiences in the EU instead of reinventing the wheel in each country.

In the LEA project (Learning Environment Applications), schoolbuilding consultants, educators, and architects from five countries cooperate to develop supportive tools and make them available throughout the EU. The relatively young profession (except in the Netherlands, where this profession has existed since 1955) of schoolbuilding consultants the challenge that the educators, architects, and government representatives involved use different professional languages, often contradictory. There is also often skepticism about the concept of cooperation in intergenerational, multiprofessional groups: "Educators can't read floor plans!" "Architects are only concerned with self-presentation!" "Authorities do not support participation!" "Students do not understand anything about spaces!" are just a few examples. Viewpoints on participation often vary widely from one country to another, sometimes from one department to another within the same authority. That is where this handbook comes in: it is a practical introduction to proven participation formats for designing future-proof learning environments.

Teun van Wijk has been involved in schoolbuilding in the Netherlands for 35 years and has conducted more than 200 processes. Under his leadership, a handbook has been created that integrates experiences from Germany, Italy, Austria, and Switzerland, building upon his extensive expertise.

Participation has many parents

National Specifics are integrated by Prof. Beate Weyland for Italy, Dr. Cornelia Dinsleder for Switzerland, Dr. Petra Regina Moog for Germany and Austria and Ir. Teun van Wijk for the Netherlands.

This handbook is one of five project results of the LEA Strategic Partnership, co-financed by the European Union [ERASMUS+ 2020-1-DE02-KA202-0076755] and the Swiss Foundation Movetia. During the three-year duration, the following tools were developed:

- Massive Open Online Course [MOOC]
Led by: Heike Bablick and Karlheinz Machat
Austria, University of Innsbruck (www.uibk.ac.at/en)
- Tool for Micro-Learning Applications
Led by: Dr. Petra R. Moog and Katrin Schwahlen
Germany, Sophia::Akademie (www.sophia-akademie.de)
- LEA Game
Led by: Prof. Beate Weyland
Italy, Free University of Bozen (www.unibz.it)
- Handbook: The Art of Participation in Schoolbuilding
Led by: Teun van Wijk
Netherlands, ICSadvisers (www.icsadvisers.nl)
- Campus Development in Lucerne
Led by: Dr. Cornelia Dinsleder
Switzerland, University of Teacher Education Lucerne (www.phlu.ch)
Through constructive collaboration with a non-EU country: Movetia

The project leadership and coordination of the LEA project were under the supervision of Dr. Petra Regina Moog, Sophia Akademie, supported by the Federal Institute for Vocational Education and Training (NA-BIBB: Bundesinstitut für Berufliche Bildung), Bonn, Germany.



FOREWORD

The collective construction of a new school brings exciting moments and opportunities. We look towards the future, learn from the past, and seek practical solutions for the present. The question of designing learning settings with their corresponding learning environments is one of the core elements of education. The importance and urgency are clear to everyone, but solutions are not yet always available. Finding them requires 'participation,' a process in which collaboration, future-oriented thinking, and creativity can grow, starting with free thinking and leading to a concrete result: a new or renovated school building.

Participating in discussions whose results you see in the new building years later is always special and meaningful. The participation process gives a strong positive boost to the development of the school.

In my 35-year career, I have had the opportunity to accompany participation processes in all educational sectors, from childcare to primary schools, universities, and research centres. I have carried out this work together with my colleagues from ICSadviseurs, a Dutch consulting company which supports schools and governments in the planning, construction, and management of school buildings. Our goal is to ensure that schools provide a good learning environment where students and teachers enjoy learning and working.

In writing this handbook, I have drawn primarily on our practical experiences; it is a book filled with tips, explanations, and ideas, and not a theoretical book about 'how it should be done.'

My aim was to write a handbook that supports the goal of LEA: the development of tools which can be useful in preparing schoolbuilding projects. Special attention is given to participation and the connection between education, learning environment, and architecture. This can be nicely summarized in German with the term 'pädagogische Architektur - pedagogical architecture,' which I am happy to adopt in this book.

I hope this book will be helpful when you're faced with the challenge of renewing or renovating your educational building, and I wish you much success and joy in doing so!

Ir. Teun van Wijk, 2023, ICSadviseurs, Rotterdam, Netherlands

1. INTRODUCTION AND SUMMARY

1.1 Introduction

We're building a school!

In a school, many people work and learn, and no two of them are alike. A participation process gladly makes use of this diversity. By bringing together all these different people, a wealth of knowledge is created, which can be used to design rich, inclusive learning environments. Diversity is a natural starting point, because the new educational building will eventually be used by an equally diverse group.

The participation process is successful when each participant can proudly say later, 'Look how beautiful our school is, and I contributed!'

User participation in schoolbuilding

Participation in schoolbuilding is a process in which the people who will use the building are actively involved in determining the design principles. The goal of participation is to understand the needs and expectations of education staff, students, and learners, collectively referred to as 'users,' in order to achieve suitable results.

Users can provide valuable insights and ideas about what is needed in an educational space, which might otherwise be overlooked. By better aligning the design with their needs, we can use the space and investments more efficiently, optimize facilities, and reduce operating costs. But most importantly, it contributes to the learning and working environment for students/pupils and teachers.

The entire process, from the initial idea to the first year of use, begins with the principles for pedagogical architecture and includes many other moments in which users can participate. Pedagogical architecture, as defined in a Program of Requirements, is the focal point, but we will also address the other moments in this book.



"Reflecting on which activities can be in a shared area (red), require a dedicated space (yellow), or need an intermediate solution (orange)."

Whom is this book intended for?

This book is intended for anyone interested in participation or in its organisation and facilitation, such as school board members, school leaders, teachers, schoolbuilding consultants, municipal officials, and architects. Of course, students/pupils are also important target audiences.

The extent to which users can contribute to their own learning and working environment varies from country to country. The Netherlands has a long tradition of autonomy for schools, even when it comes to schoolbuilding, which makes it an exception compared with some other countries. In these countries, the responsibility for schoolbuilding projects lies with the central or regional government. All countries are facing changes in education and attach importance to the input of schools in determining their educational, spatial needs. User participation is on the rise everywhere!

Reader's guide

The image on the cover describes how a participation process can be structured through the phases: 'Connect,' 'Why,' 'How,' and 'What' (see Chapter 7). The book itself begins with 'Why,' then moves on to organisation and implementation, 'How,' and ends with 'What you can do': a collection of workshop formats.

- Chapter 1 introduces the concept of user participation, while Chapter 2 mentions its advantages and disadvantages. The disadvantages, however, can be effectively addressed.
- Chapters 3, 4, and 5 describe the principles of organisation for different types of participation, the types of information it provides, and the participants.
- Chapters 6 and 7 cover the organisation and planning of participation. One section deals with the unique collaboration between two different worlds: Education and Construction.
- Chapter 8 delves into various aspects of a workshop, such as the elaboration of the concept of diversity, the location, and the 'energy.'
- Chapter 9 is a collection of workshops, also organised according to the Connect, Why, How, and What categories.

What will you not find in this book?

When designing and constructing a new educational building, Education and Construction always work together. In this book on participation, we mainly focus on education, with all the people who work and learn there. Many project management books are already available on construction. However, we do touch on the differences in organisation and approach between Education and Construction and the misunderstandings that can arise as a result.

User participation in schoolbuilding intersects with many other fields of knowledge. In this book, we have chosen not to delve extensively into topics for which a wealth of knowledge is already available, such as facilitation techniques, organisational change, and group dynamics.

More information on participation (from Erasmus+ LEA)

All partners in the LEA project have been involved in participation. The Pedagogical University of Lucerne (Switzerland) describes its participation method in the new construction plans for its university campus in Lucerne. The University of Innsbruck (Austria) has developed a method for producing Moocs (short instructional videos), including those related to participation. In Bolzano (Italy), the university has created a Design Game "Learning and Learning Environment," where 'design' also relates to educational choices. The Sophia Akademie in Düsseldorf (Germany) has developed micro-learning apps.

1.2 Summary

Participation

- Participation creates a balanced and cohesive sum of all available knowledge, which is much more than the sum of its parts.
- Collaboratively building a school gives an impetus to the development of education.
- Put communication/participation in the spotlight and create a plan for the entire process. Include participation in regular management meetings.
- Hang a large timetable/schedule on the wall to make it clear to everyone when each input is needed.
- Participation fosters an open, democratic culture, in which changes are welcomed and users are heard.
- Users who are engaged through participation feel more connected to the school, because they recognise themselves in the result.
- Participation helps find solutions for ongoing changes and ensures flexibility, both in the building and among the users themselves.

Participants

- Teachers and educators: Don't forget physical education teachers, even if they work at different locations. Physical activity is an important theme.
- Students: Involve student councils or study associations in the organisation of meetings; this ensures a higher turnout.
- Young people often have different needs and requests than teachers. Ensure broad representation: for example, in a student panel.
- When on a study trip, ask children to take photos of what they find beautiful or ugly about what they see.
- Teaching support staff has good insight into what is happening within the school.
- Parents: Organise a (validation) workshop for parents, children, and teachers and compare the results with the internal workshop.
- Neighbours: Communicate clearly about planned changes. Many objections from neighbours can be resolved.

- Companies and institutions: Organise a validation meeting and ask if the plans align well with professional practice.

Aligning with Users

- User diversity as a "starting point" results in learning environments where all users can feel at home.
- Use methods that see diversity as an advantage and can harness all available expertise, such as the PrismaTisch method.
- When choosing formats, be aware of differences in participants' learning styles, such as visual, auditory, writing, and physical engagement.
- Look to the future, but also learn from the past and ensure solutions that function well in the present.
- Consider both the main aspects of the building (macro) and the principles for the immediate learning environment (micro).

Participation Process

- Divide the process into 'Connect, Why, How, What.' Provide inspiration (information from outside to inside) and validation (feedback).
- The 'Why, How, What' phases can be separate meetings or linked together. The latter generates more energy and better results.
- Plan a study trip only *after* the 'Why' and 'How' phases. It will be clearer which examples are relevant, which in turn enables better-focused observations.
- The construction process offers opportunities for celebrations (groundbreaking, cornerstone, topping out, opening) and educational activities.

Time

- Consider organizing a study day focussed on the theme of Learning & Learning Environment. This is relevant not only for education but also for preparing for the development process of the new school building.
- Initiate discussions early to avoid costly delays and changes during the design and construction phases.
- Try out significant educational innovations in advance.
- If the study day falls at the end of the school year, make it an extra festive day with various workshops, meals, and entertainment!
- Organise bi-weekly 'inspiration lunches' for team leaders, with lively discussions.

Energy

- Assess the energy within the group during a meeting related to 'Collaboration, Future-Oriented Thinking, and Creativity.' Adjust if necessary.
- Ensure an energetic start, variety in activities and formats, regular breaks, and an inspiring conclusion.
- A 24-hour programmeme (from 13:00 to 13:00) is ideal: plenty of energy and focus. The night helps participants to reflect, so that ideas are more concrete the following day.
- Consider providing a welcome package as a gift to all participants, including instructions, materials, and snacks.

Organisation

- Appoint an internal construction coordinator to manage practical construction issues. This prevents an excessive burden on school management.
- Work with a steering group, control group/project manager, and three workgroups: Learning & Learning Environment, Technical-Facilitary, and Design & Engineering.
- Be aware of the difference between Education (change management) and Construction (project management), with distinct roles for school management.

- Organise an 'Ambition Workshop' for the steering group, giving them knowledge and control over budget, choices, and priorities.

Location

- Organise the workshop at the school: large spaces like a cafeteria or gym are excellent and hard to find outside of the school.
- In a spacious area, set up various zones, including group tables, a large, central worktable, a 'results table,' and a table with snacks and drinks at the entrance.
- Choose an inspiring creative location that exudes a relaxed atmosphere, with informal attire, such as a farm or an old factory.
- Consider 'walking workshops': these can provide a unique, active way to stimulate discussion and help formulate new ideas.

Flexibility, Thinking in Scenarios

- Ensure a future-proof facility and logistical layout (stairs, corridors, toilets, cafeteria) and flexibility in the educational space.
- For a clustered school layout, also provide multi-functional educational spaces to accommodate fluctuations between the clusters.
- Explore different scenarios for use.

Architect

- Participation saves the architect a lot of time and prevents costly changes during the design and construction phases.
- Ask the architect to create 3D visualisations of variations to help assess functionality.

2. What is Participation?

2.1 Benefits of Participation

Benefits for the School

In a participation process, the pooling of knowledge and experience from users leads to collective wisdom: a balanced and cohesive accumulation of all the available knowledge, which is much more than the sum of its individual parts. Users have firsthand experience of what the learning environment can mean for learning, both positively and negatively. For example, the learning environment can facilitate switching between teaching methods, such as classroom instruction, group work, and individual work. It can offer transparent walls where desired, combined with a sense of security where needed. The physical space also strongly influences whom you encounter. Spontaneous conversations and informally shared knowledge within a team is much easier when you work closely together and see each other frequently, rather than being spread out across the building. The better the school's needs are defined, both in terms of what is required and why it is needed, the greater the chance that the new building will meet those needs. Without participation, architects will understandably draw from their own experience with previous projects, while the desires and context of the new project may significantly differ from their experience.

Fits into a Democratic School Culture

Collaboratively building a new school is a unique opportunity that may only arise once every forty years. It provides a positive reason to look to the future and a moment of reflection to learn from the past. It stimulates the development of education and the learning environments that support it. Educational staff want to be heard as professionals, have influence on their own environment, and feel connected to the school as a learning organisation. Participation offers them the opportunity to contribute to decision-making processes and help shape their own learning environment. Working together and actively participating in the planning process ensures that the new school reflects the democratic values and needs of the school. It promotes an open culture that welcomes changes, which is necessary in our rapidly changing world.

Ultimate Goal

A school in Amersfoort outlines the following goals in its communication plan, with a sequential order of importance:

1. Knowledge: stakeholders and the community are well-informed about the project.
2. Attitude: stakeholders and the community have a positive attitude toward the project.
3. Behavior: stakeholders and the community actively support the project, and there are no objections from the community.

Communication/Participation

The concepts of communication and participation largely overlap. A communication plan includes many components related to participation. In such cases, the text reads: 'Communication/Participation'.

Acceptance and Sense of Ownership

When users can contribute to the design of their school building, they experience greater involvement and will be more satisfied with the end result. Their input strengthens the bond they have with their environment. This is not just about preparing for a new building, but also about beautifying and maintaining their own learning and working environment.

Inclusive, Rich Learning Environments

By taking the diversity of users as a starting point, learning environments are created in which all users can feel at home. This can be achieved by accommodating their talents and paying attention to any physical and sensory limitations. Consider neurodiversity as well, such as ADHD (sensitivity to stimuli) and phobias (such as fear of heights); the physical space can have a significant impact.

Increasing the Effectiveness and Efficiency of Investments

Aligning the design with educational needs can make investments more effective. This requires making conscious decisions early on about which ambitions within the budget take priority. In this way, important ambitions – such as the design of the outdoor space – won't be sacrificed just because they come last in the process.

Flexibility in Building and Use

A learning environment is not a static entity. Space requirements can change within an hour (when switching between different teaching methods), a day (with multifunctional use), or several years (due to growth or shrinkage or new insights). Adaptability is an important topic in participation. Flexibility is required for (a portion of) the building, for the educational logistics, and among the users themselves. In the latter case, it helps when users have been involved in the choices made for the learning environment, such as the use of multifunctional spaces.

Inform the entire school

Ensure that participation is not limited to a select group. Make sure that all staff members are kept informed and can actively contribute to the design of their own learning and working environment at a later stage.



A 'cluster space' (learning space between a group of classrooms) equipped for various learning formats. With good visibility to and from the classrooms.

Benefits for the Architect

A well-formulated assignment for the architect offers benefits for both the school and the architect. Thinking about the future of education will lead to new insights among users. This process requires time and attention. The situation is different from the past, when education was less subject to change and school buildings could be highly standardised. Through careful consideration and the formulation of concrete results *before* the design process begins, costly changes during the design or construction process can be avoided.

The architect can support the thought process by providing concrete representations of the school's ideas, such as 3D visualisations. Many users are not experienced in reading drawings, let alone forming a spatial mental image from them. Visualisations are especially useful for comparing different options. When it's not about choosing between options but rather just one solution, visualisation can hinder the process. The image itself makes an impression, and users may find it aesthetically pleasing, but they may struggle to critically assess what is depicted in the image.



Below: a visualisation of the design. Above: reality.

2.2 Resolvable objections

The benefits of participation are significant, but we also hear objections. These objections may be based on misunderstandings or are easily resolvable. In both cases, it's good to take them into account and ask for further clarification. Below is our list of 'common objections.'

"It takes too much time, and we have no time."

Usually, the entire school year is already planned out, and finding time for participation can be challenging. Ideally, for teachers, the principle should be, 'If something is added, something else is taken away,' but cancelling, for example, a well-prepared 'professional development day' can be disappointing. There's also the fear that the participation process might involve additional meetings: time-consuming, exhausting, and an extra burden after an already busy workday.

In practice, time is often set aside for participation at the end of the school day, for example, from 3:00 PM to 6:00 PM. In addition to good content structure for the meetings, the 'energy design' – such as a variety of activities – will also contribute to its success. For teachers, this is not entirely new; they too consider the attention span and energy of their students when planning their lessons. Some schools apply their pedagogical insights to their own work meetings, but this is usually not the case.

A good alternative can be to use the theme 'Learning & Learning Environment' as the focus of a professional development day. This can replace two or three separate meetings. It saves time, attracts more participants, and often results in higher quality due to the strong focus on a single theme.

"It causes delays in the construction process."

Participation doesn't need to be time-consuming and actually helps prevent costly changes and delays during the design and construction process. It's much more efficient to have discussions at the beginning rather than halfway through!

Inspiration Lunches

For a large project, regular participation of various team leaders was required. The necessary time was found by organising a well-prepared Tuesday lunch every two weeks, for a whole year. Each meeting had its own theme, prepared by a different member each time. The agreement was not to use PowerPoint but to foster lively debates through questions or statements. The meetings were interesting and enjoyable; everyone looked forward to them.

If it has to be at the end of the school year, let's make it a party!

A large university of applied sciences in Antwerp celebrated the end of the academic year with a study day on Learning & Learning Environment, offering a choice of 10 inspiring and active parallel workshops, fantastic meals, and an evening filled with hilariously funny comedy. 800 teachers participated, and it was one big celebration of participation!

"Dominant participants gain too much influence."

This experience often stems from the meeting culture, with which many participants have had negative experiences. A good facilitator selects formats that allow participants to contribute equally and encourages all participants to voice their opinions.

"Teachers are tired and need a vacation."

Timing is indeed important. For example: after a restful vacation might be better than at the end of the school year.

"We've done all this before."

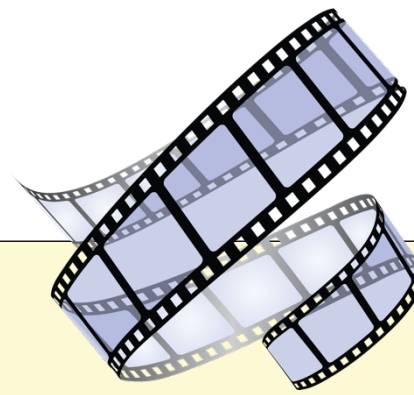
When a project is started up again after several years of inactivity, the results from the previous participation process may no longer suffice. New insights may have emerged, there may have been changes in teaching staff, or conditions may have changed.

In such a situation, it is advisable to begin from scratch, but to also ask participants to refer to the 'old' results and, if they are still relevant, reintroduce them.

"It creates false expectations."

For most participants, the participation process will be new: they do not know what to expect or what is expected of them. Ask participants to focus on their expertise in how the learning environment can support learning. Explain that it is not about concrete building solutions: that's the *architect's* job. Also convey that it's about much more than creating a list of classrooms, but collectively envisioning everything that will happen in the new building - as if in a film - in terms of (learning) activities." Express the common ambition to maximize the use of the available budget for all desired activities through good and creative thinking. This can also be achieved in multifunctional spaces, where various activities can take place.

A coherent vision of learning activities which should logically find a place in the new building is quite different from a list of spaces you would like to have. The stack of wishes can quickly become too extensive and expensive, leading to unclear choices and disappointments.



*From
photo to
film
thinking*

Should a new school building be tailor-made?

A new school building accommodates change. Hopefully it's not a perfectly tailored suit, because it will quickly become ill-fitting due to changes. What helps is to explore different scenarios for its use.

The future is no longer a static photograph, it's a movie with unexpected twists!

Example of exploring scenarios

A school opts for a cluster model (classrooms around learning plazas) but is still contemplating the desired team (cluster) arrangement: should it be by subject areas or grade levels? This choice has significant implications for the staff. However, an analysis subsequently reveals that both variations fit within the same cluster layout of the building; only the signs on the doors are different! This is also because several multifunctional classrooms are planned between the clusters, which can be flexibly utilised.

"We're not ready yet!"

Users sometimes don't feel ready to take on an expansive schoolbuilding project. They see it as a (too) heavy responsibility: their ideas will be set in stone for the next forty years! The fact that the schedule of the construction process determines the pace can feel like an upside-down world to them. "The bricks are determining the education" is a lament I've often heard, followed by a plea for more time to further develop the educational vision. Sometimes postponement is possible, but usually the set budget remains unchanged and can quickly lose value due to inflation. Users can be asked which aspects of the pedagogical vision need further clarification. Often these are not the same topics that an architect needs to know at the start of the design process. An explanation of the differences between the Education and Construction processes, with concrete examples, can be helpful. There is often time in the planning to make choices about the exact configuration of educational areas.

It's also a good idea to explore different scenarios for use.

"We're not the architects."

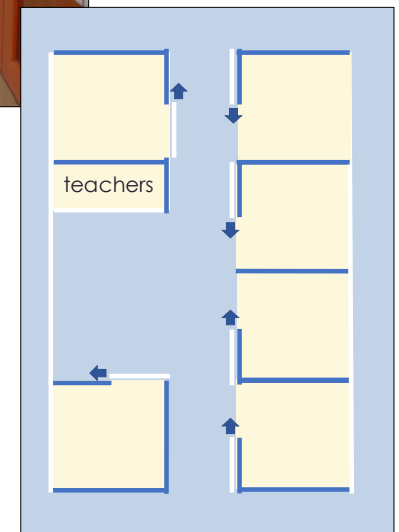
An architect with a lot of experience in schoolbuilding may be able to design a good school without participation, but is it exactly the school that is needed?

Questioning the users is best done *not* by the architect but by someone in an independent position. This will also help prevent a conflict of interests later on, when evaluating design proposals.

"Our architect doesn't want it."

This does happen, in rare cases. For example, with an architect who is strongly convinced he/she knows what makes a good school: not only the building but also the education that should take place inside it. These architects can have both traditional and highly 'visionary' views. The idea that users will naturally adapt their educational beliefs and behaviors to an environment that deviates significantly from what they would prefer has, in the past, led to stress, strained relationships, and failed projects within schools.

To prevent this, make it a condition in the architect selection process that the architect is genuinely willing to collaborate with the users.



"Participation doesn't align with our culture; we don't like workshops."

Some people have an intense dislike of workshops, and the question is: why? Often, it's about the 'icebreakers.'

Workshop books are full of fun icebreakers, and they are popular with enthusiastic facilitators. Keep in mind, however, that a portion of the participants absolutely despise them! On the other hand, a lively, cheerful atmosphere is desirable, and an energizer around 2/3 of the way through the day can certainly help with that. Think about what best suits the participants, or even better, ask them to organise it themselves.

"The outcome is already predetermined."

Participation should not be a trick to gain support for a solution that is already predetermined. Participants will clearly sense that. It's important for facilitators and participants to know how much room there is for making choices.

2.3 Sometimes, participation not (yet) a good idea.

Participation is not always a good idea; it can come too early or feel threatening to the participants.

"There isn't yet a clear understanding of the stakeholders and their interests."

In the Netherlands, it has become common for organisations in education, welfare, sports and culture to collaborate under one roof as a 'Child Centre' when building new primary schools. The goal is to collaborate on content, but sometimes it is initially about the advantages of a shared building. It's possible that the boards have different visions of the collaboration. The participation of a party (mostly tenants) is also not always clear: for example, which childcare organisation will participate.

Before the participation process can begin with the users, interview rounds are conducted with the boards. This ensures that objectives and general frameworks can be clarified for everyone, and that there is a clear understanding of the interests, needs, and expectations of each individual organisation. This way, equal involvement of all participating organisations is guaranteed. After this, the participation process can commence.

"Nothing ever happens with our input anyway."

"Oh no, not more Post-its!" A bad experience often arises from the users' complaint that nothing is ever done with their input. Ensure that conclusions are always clear, perhaps include all results in an appendix, and explain why certain input was not included in the final report.

Sometimes a report provides only the information the architect needs to get started. Much is omitted. But who are you writing for: the architect, or also to serve the school's change process.

The school organises the energizer themselves.

Ask the school to organise an energizer themselves. Who knows, the facilitator may be surprised!

For example, in response to my request, one school came up with a short Salsa dancing course. While the whole group was busy swaying their hips, the facilitator (me) chose to take a short break in the corridor.

Relevant energizer.

The director of a large vocational school was a big fan of Italy and wanted to incorporate that into the ambiance of the new building, as a contrast to the northern Dutch austerity. The entire workshop day was organised in an Italian style. For an energizer, he had invited a pianist and an opera singer who, in a short time, managed to get the whole (large) group to sing along heartily to well-known opera hits. It generated a lot of energy, a sense of togetherness, and *molto italiano!*

Such delightful details create lasting memories.

"The topic feels threatening to some participants."

The topic can feel threatening, especially when it involves issues such as dissolution or downsizing of organisational units, and jobs are at stake. Some examples include reducing the number of locations, which could lead to a reduction in the number of janitors. Also, the discontinuation of certain elements, such as relocating a library or discontinuing a specific subject or department, can understandably raise concerns among those involved. It is a fundamental requirement that participation take place in a safe environment where the concerns and interests of the participants are taken seriously. All workshop participants must be aware of the framework within which they can participate in the process.

"The design has already been purchased, as a turnkey solution."

This doesn't happen often, but occasionally it does, as with a sports hall or 'container classrooms'. In such cases, changes can still be considered. What may constitute a minor adjustment for the supplier can be highly beneficial for the users.

3. FORMS OF PARTICIPATION

3.1 Ultimate Responsibility and Planning

Steering Committee

In the Netherlands, the school board is typically the ultimate responsible client in schoolbuilding. In some cases, however, such as for a *Kindcentrum* (Children's Centre), it can be the municipality.

Many people are involved in the schoolbuilding process, both from the education sector and the construction sector. It must be clear to everyone that all decisions are ultimately made in one place: the steering committee. In the Netherlands, the steering committee consists of representatives from the ultimate responsible client (school board or municipality) and the school's management, often supported by an independent project manager.

Participation in the Spotlight!

Defining the design principles, the 'pedagogical architecture,' is the main component of participation in schoolbuilding. This phase is called the 'definition phase,' because it defines the content and organisation of the project. In Germany, Austria and Switzerland, the term 'Phase Zero' is gaining ground. It was coined by the Montag Foundation and refers to the numbering system used in these countries for the various phases of the construction process (Phase 1 - 9). User participation and a focus on pedagogical architecture were not included in the schoolbuilding procedures in these countries, which is why the definition of user needs was termed "Phase Zero." This term also emphasises the need to think carefully before the actual process begins. In these countries, participation in the subsequent phases is not yet considered, while in the Netherlands and Scandinavia, communication/participation is a topic for the entire process, from initiation to occupancy. There are various issues that concern users throughout this process, including the implementation of design principles into the actual design, building design, material selection, temporary accommodation, furnishings and furniture, relocation, relations with parents and residents, educational opportunities, exam planning, building-related celebrations, art, greenery, publications, and much more.

Communication / Participation Plan

Create a 'Communication / Participation Plan' for the entire process, from initiation to occupancy, making it clear for everyone when and what they will be heard about, whom to approach with questions or ideas, and what activities, such as celebrations, are planned. Below is a sample table of contents for a Communication / Participation Plan:

1. The difference between the initial situation and the intended future situation provides the basis for communication. The communication objectives set the framework and allow room for initiative and creativity within it.
2. Based on the school's core values, a core message is formulated to guide the attitude, image, and tone of communication.
3. An analysis of all possible stakeholders determines which stakeholders are relevant for this Communication / Participation Plan.
4. Based on the objectives and stakeholders, several strategic choices are made regarding Communication / Participation.
5. These strategic choices provide direction for the necessary mix of (Communication / Participation) tools in various phases of the process.
6. Finally, a proposal (schedule) for the implementation of Communication / Participation throughout the entire process is presented.

Schools typically have no experience with schoolbuilding processes. Therefore, ask the project manager to create an overview of the expected topics requiring clarification from the school, for the entire process. The school can then align its communication and participation activities with this list. The reason is that construction will *always* adhere to its own construction schedule. If a school wishes to align activities but waits for a sign from construction, it will always be too late. Proactive action is required! The easiest way is to integrate communication/participation into the existing communication structure, for example, by including it as a regular agenda item in the school's regular management meetings. This ensures that it consistently receives the attention it deserves. In addition, there are many practical construction issues, such as furniture deliveries and various specific questions that place a heavy time burden on school leadership. It is advisable to appoint an internal construction coordinator so that school leadership can continue to focus on running the school.

5.2 Forms of Participation

Participation consists of various forms, such as informing, consulting, advising, co-producing, and having control over one's own environment. In participation theory, this is often presented as a ladder, ranging from low (informing) to high (having control) participation. Maximum participation is not always the goal. In addition to the ladder, the toolbox is also a fitting metaphor, where an assessment is made, for each situation, of which tool best suits a specific question. Throughout the participation process, it's about finding the right mix of various possibilities.

Informing

During the informing stage, users receive information about the project but do not have direct input. Teachers, for instance, want to be well-informed, both to align their expectations and activities with the upcoming changes and to anticipate any potential disruptions, such as noise and dust during construction and their duration.

Informing can take various forms. Plenary meetings are often not as effective since not everyone can attend, and knowledge quickly fades. Consider alternative methods, such as displaying a user-friendly schedule of all schoolbuilding activities on a wall in the school or creating a "Building Bulletin" featuring interviews, progress updates, announcements, and event notifications.

Informing

Create a dedicated website, separate from the school's main site, which provides all relevant information. This website can include interviews with builders, updates on construction activities, a live webcam feed, a forum for addressing questions and more.

Public Release

Transform the principles of Pedagogical Architecture into an appealingly designed public version which can be used both within and outside the school. Alternatively, create a poster that presents all the information in a clear and concise manner.

Validation Meetings

Organise validation meetings in the late afternoon, on multiple occasions, for anyone interested. During these meetings, the Learning & Learning Environment workgroup presents its findings and concludes each session with statements (e.g. using the Mentimeter app) for participants to respond to. The moderator may follow up with further questions.

Open invitations (without statements and Mentimeter) for feedback can be confusing, as it may not be clear to what extent a particular opinion is shared by the entire group.

Consulting

The steering committee typically delegates the development of the Program of Requirements to the school's administration. The administration, or a designated staff member or advisor, actively consults with the users on specific aspects, collecting valuable input. Based on this input, conclusions are drawn, and decisions made.

One example is the 'office hours meeting' during the design phase, where different user groups, such as specific classrooms or educational clusters, are consulted about the layout of their spaces. The term 'office hours' is used because the groups follow a strict schedule, taking turns to provide input. Sometimes, in addition to the architect, an installation consultant is present. Not all participants may have been involved in previous workshops or are familiar with the underlying principles. Therefore, when inviting participants to the office hours, include these principles to ensure everyone is informed. Also, have a member of the administration present to address questions promptly.

Another example of consulting is the internal validation meeting. These meetings involve the presentation of results to stakeholders or experts to gather feedback, approval, or confirmation and ensure the accuracy and coherence of the project.

Advising

Users are actively involved in advising on specific topics. An example of this is within the Learning & Learning Environment Workgroup, where two participants are assigned a clearly defined task to conduct a sub-study and report on it at the following meeting. They have the freedom to decide how they will conduct the study and whom they will involve. The subtopics consist of practical research questions rather than opinions, as the goal is not to create a parallel Learning & Learning Environment Workgroup. Examples of these questions include: how many cyclists need a shower facility? What is the commuting distance of people who drive to school? Is there a need for a school garden?

Co-production

Users and school management work together as equals. The results (principles for the pedagogical architecture) serve as the basis for the designers. This situation best describes the practice in the Netherlands, where the school's management actively participates in the process and presents and safeguards the school's mission and future vision.

Governance/Participation Organised at Different Levels

At a large university campus in Groningen, governance is organised by dividing the extensive space inventory into categories, each with its own objectives and description of governance:

1. *Feeling at Home, Experiencing Small-Scale:*
Teacher teams are allowed to make choices within certain guidelines for the layout of their work environment. This category also includes specific laboratories or workshops and a limited number of general classrooms that are linked to the team.
2. *Efficient Use of General Educational Spaces:*
These spaces are centrally scheduled. The optimal combination of various room sizes is periodically (and centrally) analyzed.
3. *Hospitality on Campus:*
Restaurants, media libraries and other general facilities are centrally managed and are not tied to a particular faculty. Users participate by providing feedback through interactive screens: for example, with regard to lunch menus.
4. However, there are other categories over which users have less influence, such as technical rooms and spaces available for rent to external users.

Autonomy and Ownership

Teachers can decide for themselves how to arrange their own environment. For example, they can have individual control over their own teaching space, or, as a team, over their own team area.

The self-determination theory (Deci and Ryan) suggests that for well-being and motivation, autonomy, experiencing connection, and developing competence are important. This applies to everyone in the school, including students/pupils and teachers. When users can have direct influence on their own learning and working environment, it contributes to their well-being and motivation. For example, being able to hang materials on the walls, having school furniture that is easy to move, regulating lighting, or having windows they can open themselves. The location of staff rooms is a popular topic. Most schools opt for workspaces within the educational cluster and recreational spaces in a shared meeting area, preferably with a rooftop terrace if possible.

3.2 Celebrations and Opportunities for Education

A schoolbuilding process offers various opportunities for celebration. Traditionally, there are the first pile, first stone, highest point, completion, and opening. Students/pupils can 'participate' in the design and construction phase: for example, by building models, creating their own designs, visiting the construction site office, going on a site excursion, or conducting interviews.

Construction professionals, including construction workers, consulting engineers and architectural firms, often enjoy being invited to school to share information and promote their profession. Sustainability is a popular theme for such occasions. In special cases, urban ecologists and archaeologists may also be involved, providing unique educational opportunities!

Archaeological discoveries on the construction site are highly valuable to showcase within the school building. Connecting with the history of the location enhances the school's identity as a unique place. The same effect can be achieved by incorporating elements from the old building into the new one.

Viewing construction as an educational opportunity contributes to a positive attitude toward construction activities, which can, of course, be disruptive. It also has an impact on the users, who get to be part of this unique journey.

Archaeological Discovery

The school's management in Hardenberg was deeply concerned about whether the construction would be completed in time for the following school year. It was a significant setback for the schedule when an archaeological discovery was made on the construction site. Fortunately, the archaeologists worked swiftly and came across the lid of a kind of box. In the presence of local television, the school's management was allowed to cautiously open this box on April 1st and found a highly unusual document...

A very successful April 1st prank, in which the construction companies, school and television took part, and the school's management completely fell for it!



Archaeological excavations integrated into the construction

4. NEEDS, CATEGORISED

When you ask users about their spatial needs, a wide range of topics arise. Sometimes about the building's overall design, but most often they concern the immediate learning environment, such as better acoustics, fresh air, improved Wi-Fi, more openness, less openness, more storage space, greater flexibility, less dullness, more tranquility, more space for different teaching methods, personal workspace or flexible workspace, more electrical outlets and so on.

By immediately collecting all the input in the right place, you can prevent enthusiastic users from being discouraged by comments like, "That will be addressed later on."

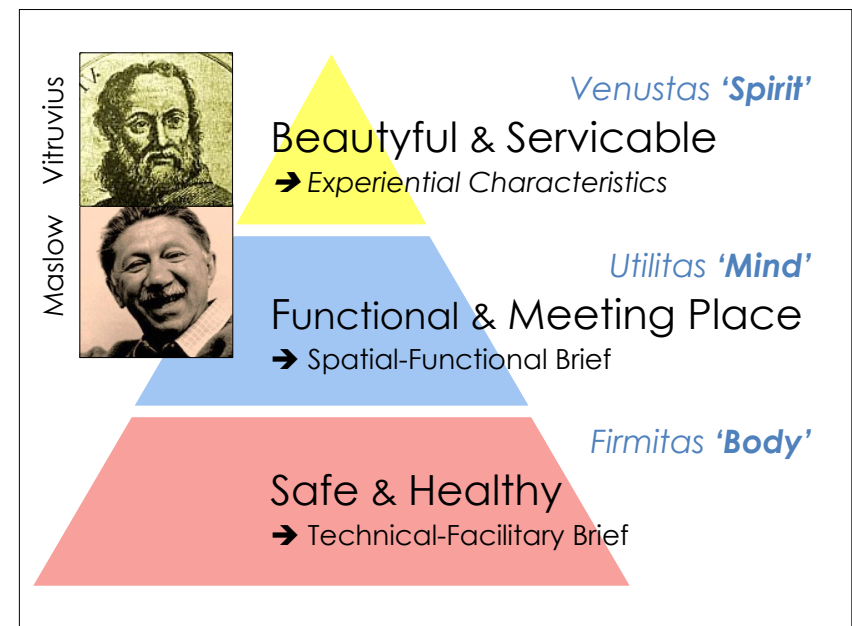
4.1 Three Categories

Vitruvius (c. 85-20 BC) was a Roman military engineer and architect. His 10-volume book on architecture, *De Architectura*, had a significant influence on architecture. According to Vitruvius, the beauty of a building depends on the degree of "Utilitas" (functionality), a concept he connects to "Firmitas" (durability) and "Venustas" (beauty).

More than 2,000 years later, this is still a practical division, sometimes depicted as a Maslow's hierarchy-like pyramid, with "Venustas" at the top, "Utilitas" in the middle, and "Firmitas" as the base. Maslow's followers have extended the top of the pyramid to include a higher peak representing social service. It's notable that Vitruvius described a building in terms of human needs and not as a collection of technical components.

Ann Taylor, author of "Linking Architecture and Education," names these three categories "Body" (Firmitas, durability, health, safety), "Mind" (Utilitas, functionality, smart, meeting place), and "Spirit" (Venustas, inspiration, experience). For each topic, she considers what it does for the "Body, Mind, and Spirit" of users and the of building. This nomenclature also expresses that all three categories are equally meaningful to users and require attention in participation.

Sometimes architects ask users to focus only on the functionality (Mind) of the building, because they believe that experience and technology are the domain of



architecture. In doing so, they forget that many user-specific choices are possible in those areas too.

Thus: the three categories into which needs can be divided are:

- Experiential Characteristics (culture, atmosphere, and identity)
- Spatial-Functional Programme of Requirements
- Technical-Facilitary Programme of Requirements

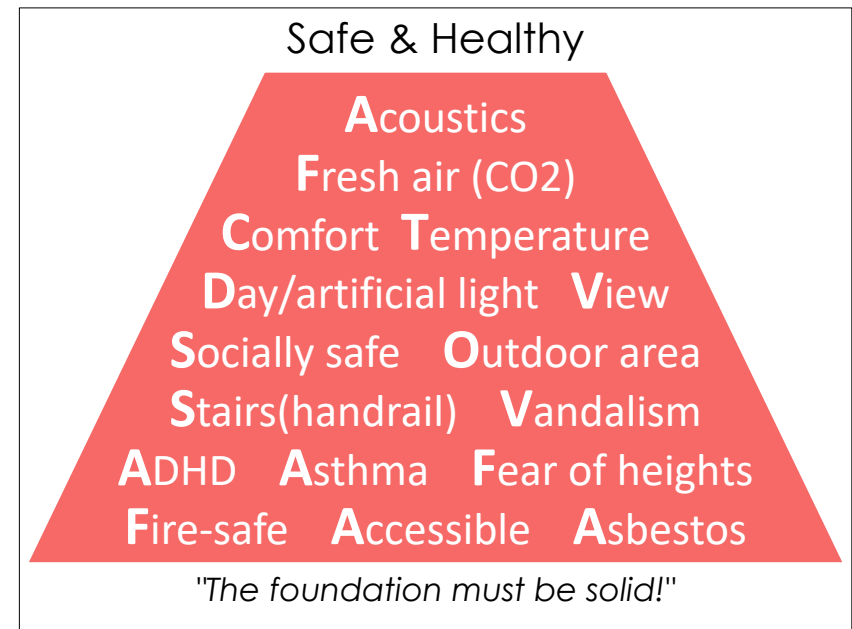
Technical-Facilitary Programme of Requirements

This forms the foundation of the pyramid. The principle is that regardless of all the ideas generated, the foundation must be sound: strong (construction), healthy (light, air, sound, hygiene), accessible, safe, easy to maintain, organised, and compliant with all requirements, laws, and regulations. The assumption by users that this doesn't require attention and will 'take care of itself' unfortunately doesn't hold true. In daily practice, users may encounter issues in the new building that, with hindsight, they wish had been handled differently. In the workshop session on facility and technical requirements, participants go through a list of topics where choices are possible, along with descriptions of the pros and cons of different choices.

A safe and healthy indoor climate directly affects the work and learning of users. Insufficient oxygen makes people drowsy, large open learning environments become unusable if the acoustics are poor, inadequate sun protection strains the eyes, and spaces become too hot. When the construction budget is too tight to accommodate all needs, it can be tempting to cut costs in these areas. Don't do it!

Regulations for fire safety, such as dividing a building into fire compartments that can be sealed off, can influence the design and must be considered from the start of the design process. This is a familiar area for architects, who may if necessary hire a specialised consultancy firm.

The shape of a building and its location on the site offer numerous opportunities to influence the indoor climate, such as smart orientation towards the sun, the use of awnings, materials with high thermal mass, the application of solar panels, incorporating plants, and many other techniques. This is sustainable and cost-effective, leaving more budget for the quality of learning environments. Include this in the Programme of Requirements.

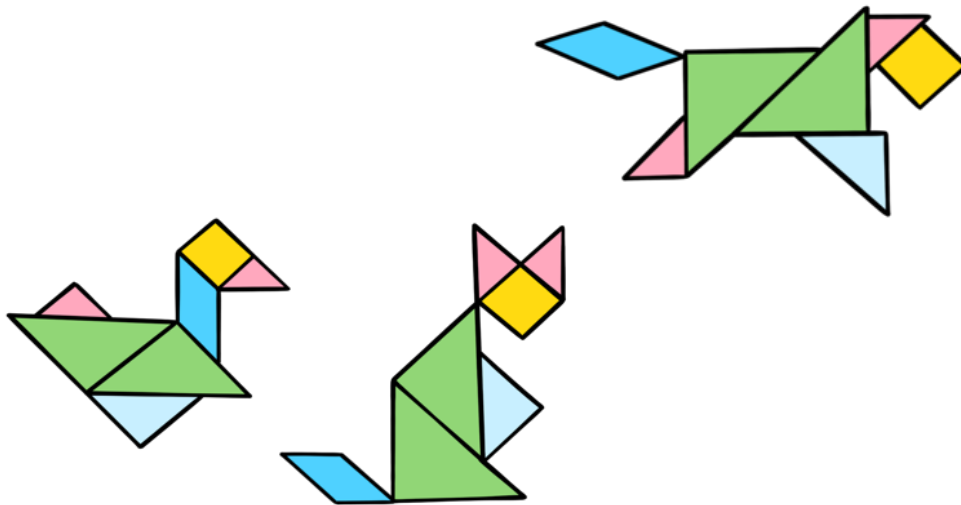


Spatial-Functional Programme of Requirements

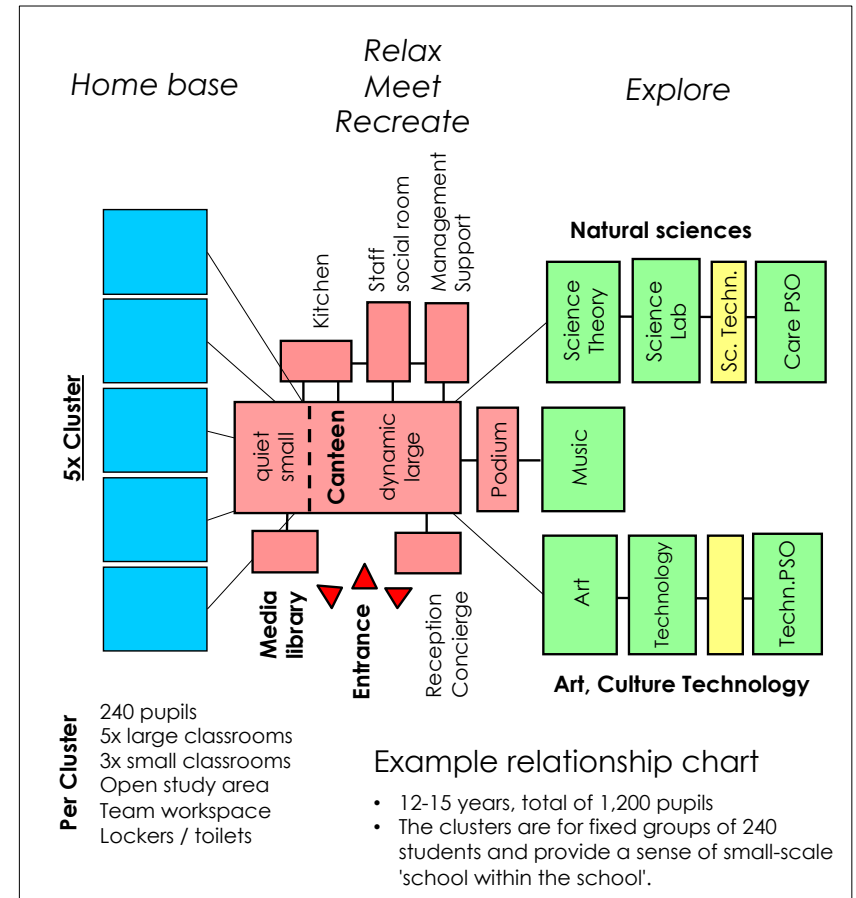
The Spatial-Functional Programme of Requirements constitutes the central part of the pyramid: the building as a functional, flexible learning environment with meeting spaces and well-thought-out spatial relationships. The school as a place where various forms of collaboration and interaction occur, and where spaces, locations, and spatial/functional relationships support the learning processes.

Components of a Spatial-Functional Programme of Requirements include a description of target groups, activities, spaces and areas, relationships between activities, relationships between spaces, and specific requirements for each space.

A 'relationship diagram' describes which spaces and activities are related, without detailing them.



With the same areas as building blocks, numerous different combinations are possible. The choice to be made has a significant impact on the functioning of the school, making it an important subject for participation. See Workshop: Model Development.



financial windfalls, and the wishlist can come in handy. Additionally, an architect may see opportunities to incorporate certain wishes into the design.

The Area as 4th Category

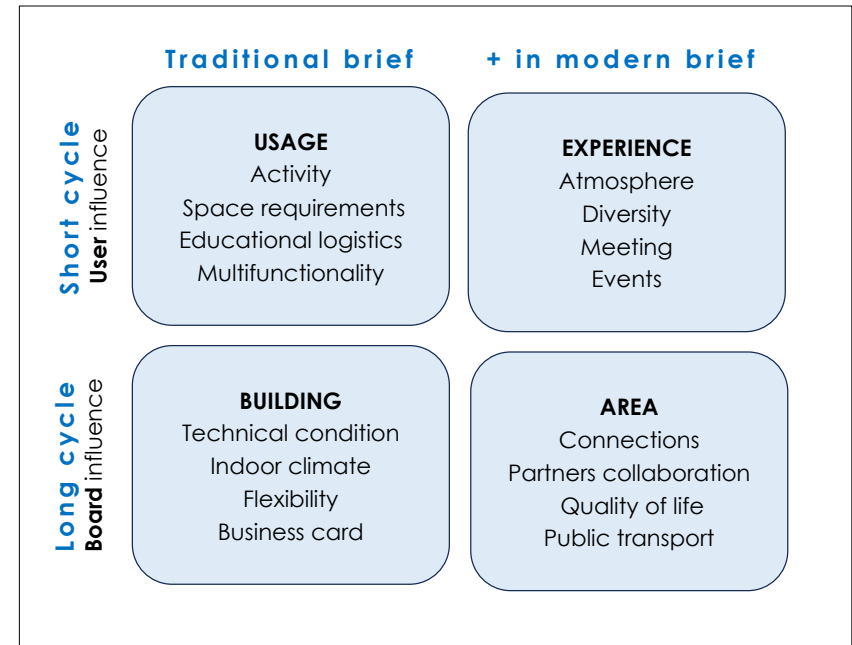
The previous division into three categories (Spatial-Functional, Experiential Characteristics and Technical-Facilitary) assumes a project for which the green light has already been given. Feasibility and the choice of location have already been determined in a preliminary study. However, this is not always the case. A large school board or a municipality may face decisions about maintaining, divesting, or repurposing its locations. In a strategic real estate plan, they record all considerations and choices for the medium and long term. Location, or in other words, 'the area,' is an essential factor here. For example, a school may have the perfect building, but what if it is in the wrong place?

For many schools, the relationship to the environment has become increasingly important. In vocational education, for instance, the proximity of companies with which it collaborates and where a portion of the education may even take place is a clear advantage. A hospital is another good example, as are sports facilities or opportunities for special education students to gain practical experience near the school. Equally important: safe cycling and walking routes, which can determine whether or not the school can offer evening classes. By adding 'the Area' to the three categories, there are actually four categories that are valuable to the school. This allows us to speak about the utility value, experiential value, building value, and area value of a specific building or design. The central question is: to what extent does this building or design, with its four values, contribute to our proposed policy?

Horizontal in the Framework

Experience & Use are more changeable than Area & Building.

Policy regarding Experience & Area should consider this variability and pay close attention to the current and future needs of the users. Policy regarding location in a particular area and investments in a building covers the long term, and fits into strategic policy. This is primarily a managerial responsibility. User participation can also be useful here, for instance, to make good use of the knowledge available within the organisation.



Environmental Law

In the new (Dutch) environmental law, participation is mandatory, but the manner in which it is implemented is flexible. Responsibility for participation lies with the initiator. For schools, these are the school boards or the municipalities, depending on who the developer is.

Participation in Amersfoort

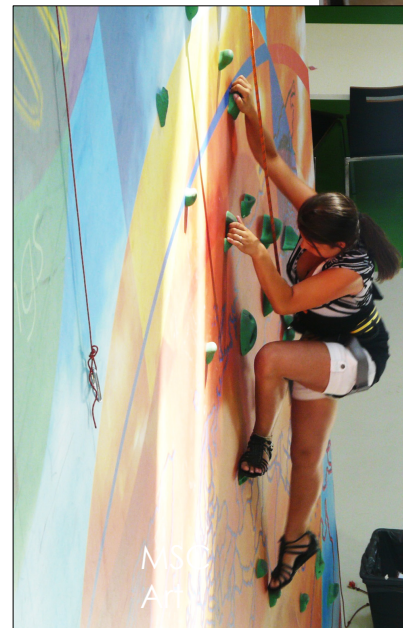
The municipality of Amersfoort outlines a step-by-step plan in a participation guide, from the initial idea to the application for an environmental permit. Based on the size of the project and its impact on the surroundings, they describe a specific approach. For instance, dormer windows and extensions to houses may not require participation, but for a school building, an environment roundtable is organised during which the plan is discussed by officials who assess it from various perspectives. This takes place after involving the local residents in participation.

Vertical in the Framework

Use & Building have traditionally been the main topics of a Programme of Requirements. These are subjects that can be described concretely in square meters, relationship diagrams (floor plans), and requirements for indoor climate. Experiential Characteristics (culture, atmosphere, and identity) has become a more important theme, because students are expected to be more independent (self-directed) than in the past. They are at school not only because they *have* to be but also because they *want* to be, in a place where they enjoy learning. The same applies to the staff.

Area, too, has become increasingly important, as a school is now regarded more as the logical heart of a neighbourhood, with facilities the community can use and, conversely, where education can take advantage of opportunities in the environment.

Construction almost always takes place in densely built areas, which places special demands on the plans. Examples include special facade features to counter traffic noise disturbance, and consideration of the needs of local residents.



*Vibrant use of colours in the heart of the school
(Niekee, Roermond)*

5. WHO PARTICIPATES?

5.1 Users

Management, Board, and Employee Participation Council

The management is actively involved due to its various interests and responsibilities, such as educational development, employee well-being, activity planning, neighbourhood relations, and the school's recruitment capacity.

In the Netherlands, school boards typically delegate the organisation of the participation process to the school management. The board monitors the framework within which plans must take shape and, together with the school director, is part of the steering committee. Board members are often interested in the progress of the participation process and may be willing to participate in certain activities, such as an informational meeting or a study trip.

For a 'participation council' participation means advocating for the interests of the staff. They should be informed or consulted in advance about the setup of the participation process. The emergence of a parallel participation process should be avoided. Participation council members may only participate on a personal basis, not as an additional formal role within the council, due to the equal status of all participants in a workshop who speak on their own behalf and not on behalf of a group. Of course, they will be informed through the management in their formal role about the results if the plans lead to organisational changes, they may be asked to provide advice on those changes.

Teachers and Educators

Teachers and educators, despite differences between school types and situations, are often deeply committed to the well-being of their school. Their interest lies in creating a good working and learning environment, both for the students and for themselves.

If physical education teachers work at a location other than the main one and are not included in the final plans, it is still essential to involve them in the process. Enhancing education applies to physical education as well. Increasing physical activity is crucial for the entire school – and not just during sports classes.

Communication/Participation Plan

Create a plan that includes a comprehensive stakeholder analysis. Briefly describe the importance of the plans and the stance (positive; positive/critical; neutral; neutral/critical; variable) for each stakeholder. Develop a matrix in which you allocate all activities per phase in the process and per stakeholder. Example of stakeholders at a school for secondary education:

Internal (Users)

Students/Pupils
Student Council
Staff
Mentors
Employee Council
Parent-Teacher Association /
Response Group
Parents
Participation Council
Retirees

Project Management

Alderman
Municipality (various)
Board / Board of Trustees
Architect
Advisors, construction parties
Suppliers

PR and Marketing

Potential Students
Potential Parents
Supplying Primary Schools

Vicinity

Immediate Neighbours
Fellow Townspeople

At international schools, teachers often relocate and may not personally experience the new construction. Nevertheless, their input and insight can be valuable, as they have seen more examples than the current school.

Students/Pupils

Students/pupils can provide good and often surprising ideas, which may sometimes be quite different from what their teachers expected. For example, modern school buildings are often very vibrant, but students also need quiet spaces. It's important to note that there are differences among students. There are various effective ways to facilitate their input and motivate them to contribute. In secondary education, ask the student council to organise a meeting, or in the case of a college or university, involve a student association. This always results in greater participation.

Teaching support staff

Caretakers often have a good understanding of what is happening inside and outside the school building and have an eye for the feasibility of new proposals. Include the support staff, such as administration and caretakers, in the meetings, as their preferences are important not only for their own working environment but also for its placement within the building.



A well-attended workshop organised by the student association

5.2 Other groups

Parents

Parents are primarily interested in primary education. Many parents live in the vicinity of the school, and involving parents can also strengthen the relationship with the neighbourhood.

Neighbours

Neighbours may have objections to changes in an existing urban situation, but good communication and design adjustments can often help resolve these issues.

Neighbours may initially be concerned about noise, but sometimes forget that the school is not in use in the evenings, on weekends, and during holidays. Privacy concerns, such as visibility from the school into backyard areas, can usually be addressed in the design. Access routes, drop-off points, bike paths, and places for cyclists to gather before heading home as a group are also important considerations for the relationship with the neighbourhood.

Information meetings and personal visits by school management to neighbours with questions are always highly appreciated.



In Düsseldorf, a collaborative creative workshop was organised for parents, children, and teachers. The children were asked to create collages, while the adults were tasked with writing texts. Because everyone worked together and met at the photo table, many joint results emerged naturally.

Municipal Officials

In the Netherlands, school boards are responsible for schoolbuilding plans, while municipal officials assess these plans against all legal and regulatory requirements. They do not contribute to the educational content of the plans, except when it concerns the integration of the plans on the site, providing information to local residents, and coordinating the necessary permits and procedures.

City Council

Ultimately, the city councils in the Netherlands decide on budgets. City council members are typically (and rightly) very interested and involved in schoolbuilding. For small municipalities, it also represents a significant investment. Consider organising a special event at the school to explain the challenges that education faces and why the plans are necessary. For city council members who do not work in education, their own school experiences are often their most significant reference point, so an event at a school is highly appreciated.

Businesses and Institutions

Companies and institutions have an interest in learning environments that accurately reflect real-world professional practices. Often they donate specific technical equipment for students to practice on.

A validation workshop can certainly be useful. In such an event, the school informs its partners from the professional field about the plans, followed by the question of whether the new educational environments will prepare students adequately for their professional practice.

Architects and Engineers

Architects benefit greatly from a well-organised participation process, as it ensures a clear and broadly supported set of requirements. It saves time which they would otherwise have to invest themselves and prevents changes during the design and construction phases. Architects can make a valuable contribution to the participation process. Their role can also be challenging, because users see them as experts and ask for solutions without considering them first. The key, for architects, is not to provide solutions too quickly. It is better to take everything back to the office and then return with various alternatives.

Study Association Organises

The study association of the physiotherapy programme mentioned that a participation meeting during the exam week would be inconvenient. They had a better idea: a breakfast workshop at 8:00 AM with delicious fresh rolls, fresh juice, and, of course, good coffee. The turnout was very high!

Study Trip

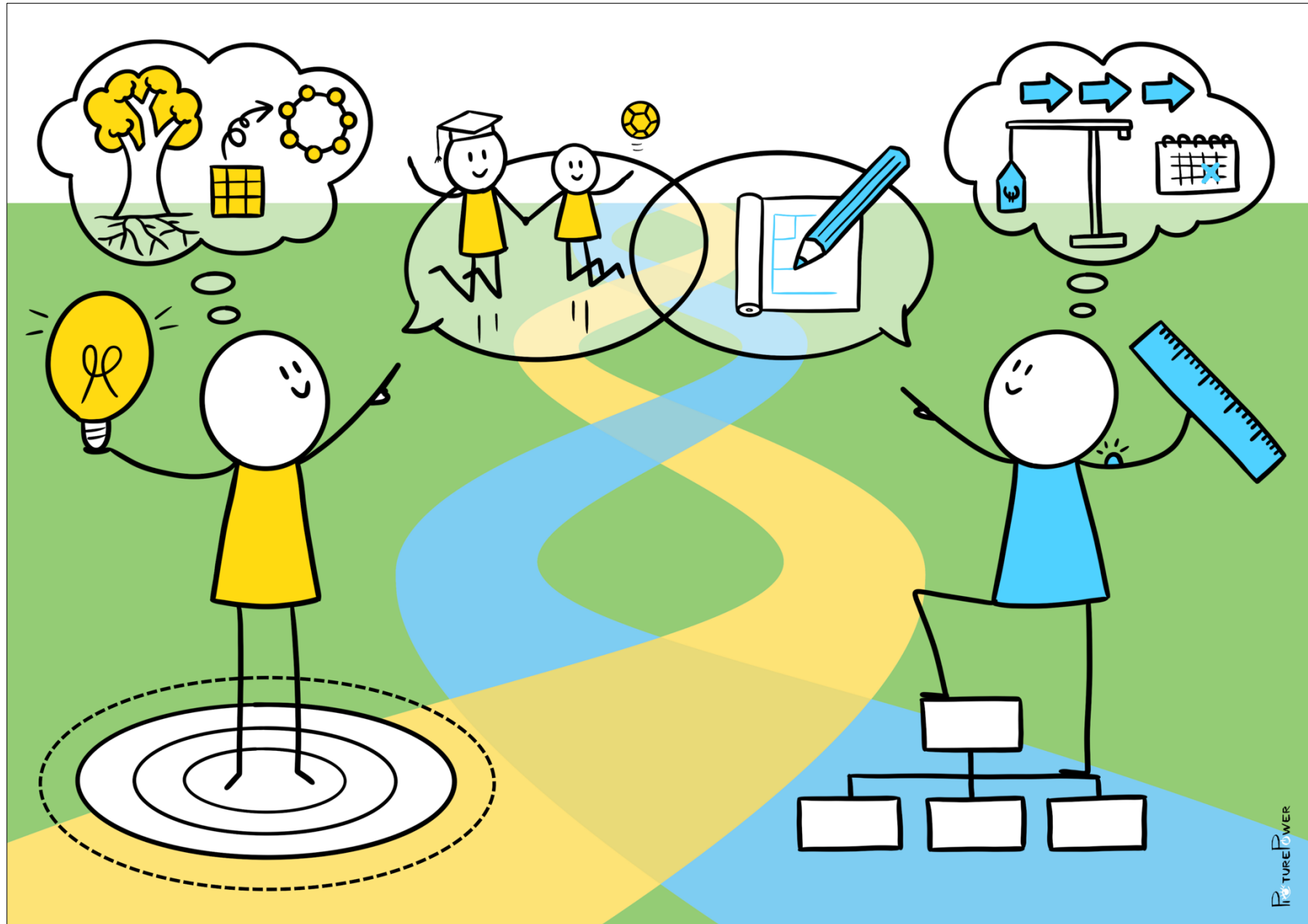
A study trip is a great opportunity to get to know each other and discuss plans and ambitions. Perhaps board members and municipal officials are interested in joining. They, too, need inspiration. A two-day study trip adds significant value, allowing you to explore the nightlife of the city you're visiting together!

Design is a Specialised Field

Sometimes, a user comes up with a design proposal themselves, and it's then implemented exactly as they've drawn it. This can go very well, but can also lead to disappointments: "Now that I see the result in reality, I would've done it very differently!"

Design is a specialised field and involves various phases with initial ideas and eureka moments that are often discarded or further developed during the design process. A good designer knows how to continually surprise you with a new idea.

6. PROJECT STRUCTURE



6.1 Education and Construction working together

Education and Construction work together towards the same goal: a school building that supports the school's educational vision and where everyone enjoys learning and working.

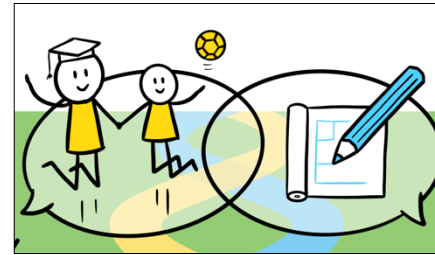
What makes this collaboration special is that the worlds of education and construction are quite different. Each has its own jargon, methods, and interests. This can quickly lead to misunderstandings and miscommunication, which is why it's important to acknowledge these differences.

The World of Education

The prospect of a new school building provides an opportunity to consider what an ideal, forward-looking learning environment might look like. Everyone will have their own thoughts on this matter. Good discussions open various windows, spark lively debates, and yield new ideas and insights. The adrenaline starts flowing! The goal of the participation process is to manage this effectively and produce results that benefit both the school and the construction professionals. A participation process shares characteristics with change management and requires open thinking, debate, connections, attention to culture and effective communication.

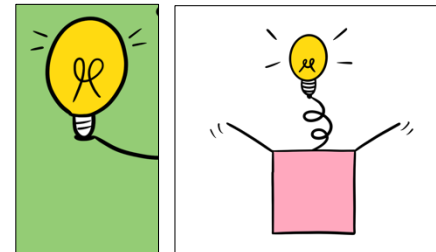
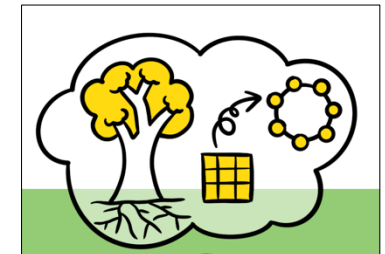
The World of Construction

Building a school involves various construction parties which, when well-coordinated, each carry out their clearly defined tasks. Overlapping responsibilities can lead to confusion. Everything functions like a well-oiled machine, and changes can disrupt the rhythm. Construction professionals, such as architects, engineers, and contractors, are accustomed to working under clear contracts, demarcation charts (which precisely describe tasks, to prevent overlap), and planning agreements, all following project management principles. It's their daily work, they understand each other, prefer efficiency, and have extensive experience in this regard.



The collaboration between Education and Construction is a game of question (what does education need?) and answer (design proposals that respond to the question).

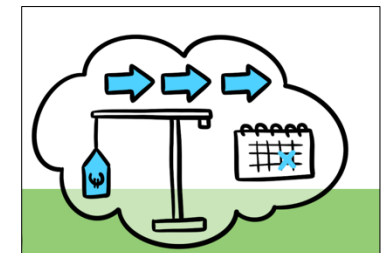
How do you involve the entire organisation, with its departments, branches, and roots, in the transition from a hierarchical, centrally controlled structure to a team-oriented, decentralized approach? One that promotes more flexibility, collaboration, student-centredness, engagement, and job satisfaction?



Teachers are professionals who like to contribute their own ideas.

This is also the moment to explore new ideas: for example, by going on a study trip.

The different phases in a construction process are planned in advance and clearly defined. Delays during construction can have significant cost implications, such as extra rent for expensive construction cranes.



The role of school leadership

In the participation process, the school leadership provides vision, leads discussions, and sets the boundaries within which joint solutions can be sought. The school leadership is at the centre of the process, to inspire, encourage conversations, and facilitate workgroups which contemplate what the future of education requires.

In the construction process, the ultimate responsibility of school leadership (board/directorate) lies with the steering committee. Progress and results of all parties are discussed there, and decisions are made. However, the steering committee does not actively participate in the construction process itself, as it needs to maintain an independent position when evaluating plans.

Understanding Each Other

Adopting a project management approach as commonly used in construction, with strongly defined task groups and tight deadlines, can quickly lead to misunderstandings, stress, conflicts, or a meagre result without consensus in the participation process. It is important for construction professionals to understand that a school's change process is not the same as a construction project. Conversely, the school should have an understanding of the tight schedules and agreements that are already documented in contracts with subcontractors.

Chair and City

Another difference between Education and Construction is the starting point: is it the micro or the macro learning environment, the chair or the city?

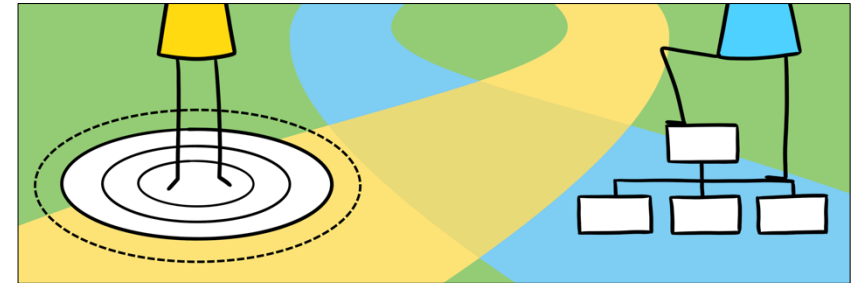
Learning mainly occurs in the micro-learning environment, the educational spaces, through interaction between students/pupils, with each other, with the teacher, and with educational materials. Teachers have a lot of knowledge about the micro-learning environment, including the pedagogical climate, teaching methods, the subject matter, teaching formats, and the layout of the educational space.

The design process begins with the big picture and then works towards the details, moving from 'City to Chair'. The urban context, for example, is an important starting point for the design.

The facilitator of the participation process can ask users to think like architects and start with the main points - the 'details' can come later.

The risk is that the principles which teachers formulate at this stage may be abstract and the implications for the micro-learning environment for the users may not be clear. This can lead to situations in which users, later on in the process, discover that the design does not meet their expectations. Therefore, ensure that the micro-

We're building a school!



Change management and construction project management are fundamentally different from each other.



*Diverse scale levels, micro, meso, macro.
At which scale do you begin, micro or macro?*

learning environment is also included from the beginning in the participation process. This provides more touchpoints for the participating end-users, fosters livelier discussions, and yields results which, from small to large, provide a more comprehensive richer representation of pedagogical architecture.

6.2 Learning & Learning Environment Workgroup

Definition of Learning Environment

In its research on effective learning environments, the OECD provided the following definition of the concept of a learning environment:

"A learning environment encompasses all the physical, social, and cultural elements in which learning (formal and informal) takes place. It includes the physical spaces, social interactions, pedagogical approaches, and organisational structures that influence learning. An effective learning environment is designed to support students in achieving their full potential by enabling them to learn, grow, and thrive in an environment that is safe, challenging, and inspiring."

Learning & Learning Environment Workgroup

From a user perspective, when designing the new school, the focus is on the learning environment. The question of which spaces are included in this concept results in a diverse picture. Is the cafeteria also a learning environment? What about the hallways? The bathrooms? The outdoor spaces?

Here, the term 'informal learning' is helpful because informal learning occurs everywhere. For example, by observing from a hallway what is being created in a workshop. Through the presence of display cases and showcases. Or simply through seating areas that invite conversation. Or by having a space for reflection and contemplation. And what about the bathrooms? A deliberate positioning of bathrooms also contributes to a safe pedagogical climate, free from violence and bullying.

It is most effective to consider the entire school environment, including the outdoor space, as a learning environment. After all, a Programme of Requirements must describe all functions and spaces.

Learning & Learning Environment Workgroup

Project groups involving users are often named: Design Group, Construction Group, or Architectural Workgroup. Consider naming your workgroup: 'Learning & Learning Environment Workgroup,' and instruct its members to think primarily about the future-oriented connection between learning and the learning environment. *That* is their expertise. Architecture is the domain of the architect. Construction is the domain of the contractor.

Core Question

Engage teachers based on their knowledge of learning and the learning environment. Continuously ask yourself and others the following questions: "How does this proposal contribute to the learning and working of students and staff?" and: "For whom are we building, and what do they need?" Ensure that everyone considers these questions, with every decision.

6.3 Project structure

A clear project organisation ensures that the project stays on track, prevents surprises such as budget overruns and optimizes expenditures within agreed-upon boundaries.

A commonly used model for a project structure consists of three levels: the steering committee (strategic level), the coordination group/project manager (tactical level), and the workgroups (This provides more touchpoints for the participating end-users, fosters livelier discussions, and yields results which, from small to large, provide a more comprehensive richer depiction of pedagogical architecture.

Steering Committee

Establish a steering committee which continuously guides and monitors the project. This is done based on a framework document which guides all goals and conditions for each phase regarding the following topics: Money, Organisation, Time, Information, Communication, and Quality. These are also the recurring agenda items of a steering committee meeting.

Keep the steering committee compact and the meetings efficient. For example: the steering committee meets once a month throughout the entire process, with the coordination group (project manager) preparing for these meetings.

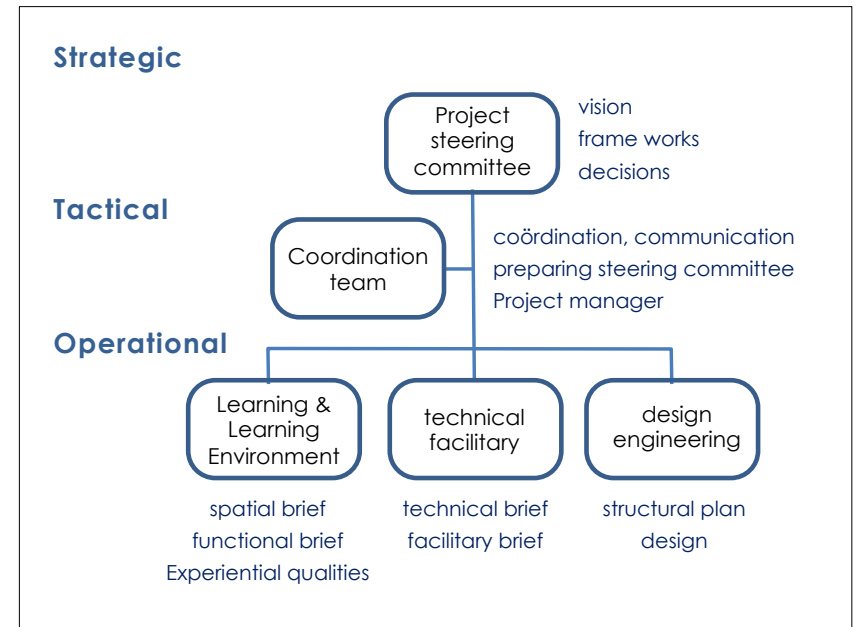
Coordination Group

The coordination group's task is to ensure clear communication throughout the participation process, and to coordinate between the workgroups. Furthermore, they prepare all decisions for the steering committee. The coordination group can consist of the project leaders from the various workgroups and the project manager.

Learning & Learning Environment

In the organisational structure for the entire project, the tasks between the workgroups are well-defined, but for the theme of Learning & Learning Environment the goal is to stimulate interaction, collaboration, and coherent results. The organisational structure is depicted here as three concentric circles:

- 1) The inner circle consists of the Learning & Learning Environment workgroup, which prepares workshops, analyses their results, and makes informed choices.



Project organisation up to the design phase

Assembling Mixed Groups

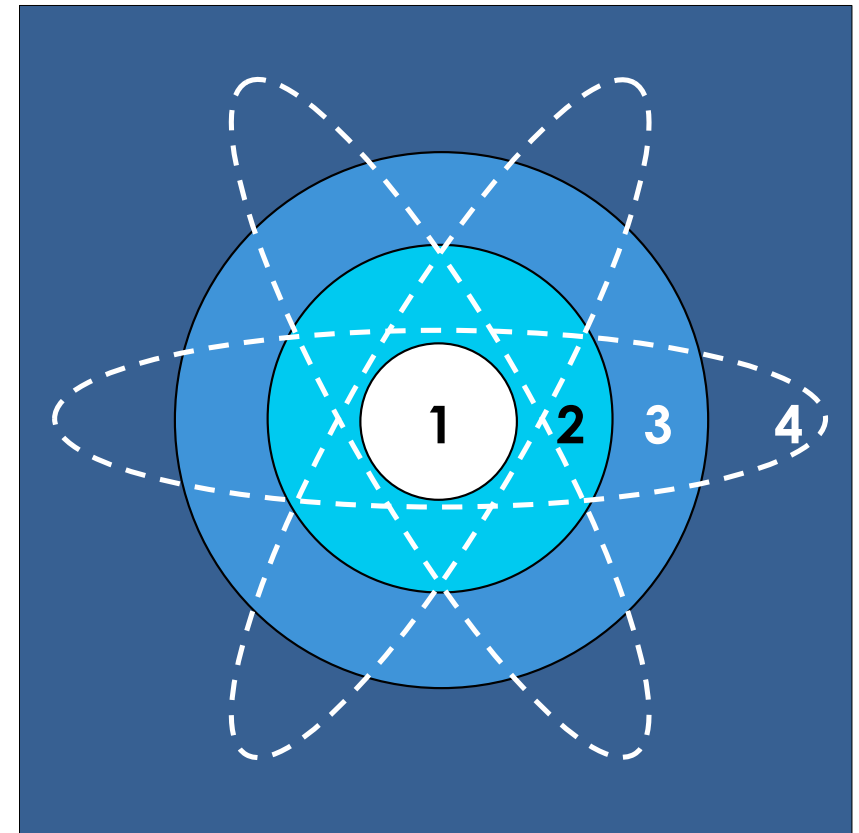
In the Learning & Learning Environment workgroup, it is desirable to have representation from all disciplines. This could involve representation from teacher teams, as well as individuals who approach the subject from various perspectives. An open call does not always result in the desired diverse composition.

One idea is to ask each team leader to be accompanied by individuals who complement their knowledge and perspective.

- 2) The larger circle represents the workshop group, which gathers several times for workshops or a study trip. The Learning & Learning Environment workgroup is included in this circle.
- 3) The largest circle represents the entire school community, which is invited to validation meetings and is kept informed in various ways.
- 4) In the "preliminary design" phase, separate meetings can be organised for subareas, such as an educational cluster, to discuss the specifics of that cluster area, or a workgroup can be established to investigate a particular issue within a set timeframe.

Technical-Facilitary Workgroup

The Technical-Facilitary Workgroup can work in parallel with the Learning & Learning Environment Workgroup to address all facilitary, technical, and logistical matters, such as security, reception, waste management, catering, supplier deliveries and departures and storage. The significance of education should also be reflected within this group, which can occasionally lead to spirited discussions!



Project organisation for participation

- 1) *Learning & Learning Environment Workgroup*
- 2) *Workshop Group*
- 3) *Entire School Community*
- 4) *Subarea Workgroups*

7. PLANNING AND PROCESS DESIGN

7.1 The time factor

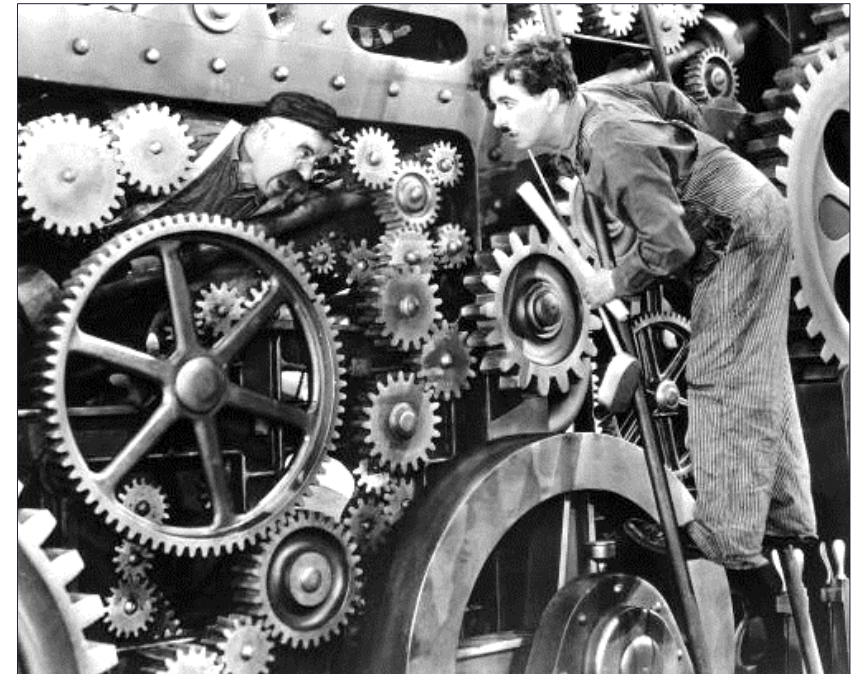
Everything revolves around good preparation

Throughout the entire schoolbuilding process, choices are made, and the process progresses from broad outlines to details. In the initial phase, choices have significant cost implications: for instance, when it comes to the form and overall layout of the building. At this stage, costs can still be strongly influenced. During the final phase, the construction execution, costs have already been determined in the bidding process. Nevertheless, costs can still rise significantly due to changes, additional work, and construction errors.

In construction, time is precious

For construction, strict time management is necessary for smooth coordination of all activities, including planning, permits, bidding, construction work, and completion. Everything is geared towards preventing bottlenecks and delays.

Contractors are generally willing to make changes but ask for substantial prices in return. This is because modifying work and construction drawings not only entails extra work and costs but also extra time. The requirement for additional time, for instance, may necessitate an extension of the rental period for construction cranes. Furthermore, alterations can impact the schedules of subcontractors, and there might be a lack of competitive pricing. In practice, it is sometimes cheaper to make an adjustment *after* completion than during construction, no matter how contradictory this may seem. If changes are still necessary, conduct a thorough, transparent analysis with a complete description and cost estimate before making a decision.



Ensure proper preparation. Changes during construction (and construction preparation) are difficult and costly.

Don't let time pass

After the approval of a construction project, there is only limited time available for preparation. Therefore, try to begin as soon as possible: the sooner, the better.

Ensure that the key educational discussions are already well-defined before you begin with the Programme of Requirements in anticipation of a schoolbuilding project. If you are considering significant educational innovations, see if they can be explored as a pilot within the existing building.

Is there still time for adjustments during the design phase?

When the design is 80% complete according to the architect, there may still be 80% room for adjustments for the school, and both can be true at the same time. This variation on the well-known saying, "is the glass half full or half empty?" sometimes leads to misunderstandings between education and construction.

Education requires flexible buildings that can adapt to change. Adjustments usually concern the layout of educational clusters, such as merging or dividing educational spaces and the furnishing of these spaces. From a construction and installation perspective, this should not be a problem, provided the design allows for this flexibility.

Education is the primary process, but the building also supports all secondary processes, such as nutrition, physical activity, relaxation and restroom use. These are less subject to change than educational concepts. Think about traffic areas (entrance area, stairs, elevators, corridors), sanitary facilities (toilets, storage areas), technical rooms (heating, ventilation), and spaces that require extra height, such as a restaurant and sports facilities. Changes to these components are often significant and costly. Within a well-structured plan in which these elements are permanently located in the right places, there is still the possibility to consider the layout of the various educational areas.

Facility Main Structure and Educational Areas

Carefully consider the facility and logistical main structure of your building. Once built, changes are costly.

Also, think carefully about the floor plan, where the size of the various educational areas has been calculated. Ensure that the justifications for the areas are logical and can be well explained to the users. Additionally, provide enough multifunctional educational spaces that can accommodate the peaks and valleys in space requirements between the different educational areas.

Flexibility is not a reason to delay thinking

Flexibility offers opportunities to adapt to changes in education. If everything in the building could change, is it really necessary to develop a future vision for the building now?

Indeed, the unpredictability of the future has greatly increased. Resilience has become a part of policy in various areas.

The use of flexible walls and architectural adjustments can ensure that the building remains functional, but the degree of flexibility should be carefully considered to keep the costs in check.

For example, flexible walls are useful for specific situations, such as combining classrooms for exams or open evenings, while fixed interior walls are more suitable for other spaces. When coordinating climate systems and minimizing noise, consider the type of use for different spaces, the number of people who will be present, and the desired level of flexibility. For a lecture hall, for instance, the required ventilation is higher than in an open learning environment.

Include the specific need for flexibility in the Programme of Requirements and incorporate it into the design choices for the building. Another aspect of flexibility is the possibility of expanding the building by, for example, 20%, preferably on-site rather than on the roof.

7.2 At which stage is participation useful?

A construction process follows a fixed sequence of phases but is less linear than it may initially seem. Before actual construction begins, the entire building is digitally "constructed." Prior to this, all decisions are documented in Programmes of Requirements, stemming from the vision of education, functionality, space requirements, environment, circumstances, and financial possibilities. The construction process is like a camera image that becomes sharper at each stage. All key themes are in focus from the beginning and become increasingly detailed in each phase.

Participation can add value in every phase, but the greatest impact is achieved in the initial phase, the "definition phase," when there is still ample room to influence the overall design of the building. In particular, the desired organisational structure of the school, described in the spatial-functional master plan (layout plan), affects the design.



Integrated Feasibility Analysis (Business Case)

At a vocational college in Apeldoorn, a large area of technical workshops needed to be replaced. Temporary housing couldn't be found. The users expressed a desire for a circular iconic building that did not resemble a factory. The design and feasibility analysis revealed that it was possible to stack the workshops on top of each other. A large elevator and two staircases provided the connection. The financial analysis was very favorable. There was room for an additional high-quality façade and sustainable energy systems.

During the design phase, user groups are consulted about the final form and layout of their own learning and working environment. For users, this input is just as important as the meetings during the definition phase.

Feasibility of Different Scenarios

During a feasibility study, various scenarios for a project are examined, taking into account factors such as location choice, school size, financing, and timeline. Active involvement of users can help assess early on whether the scenario is viable and whether it will meet user needs. This creates confidence, which is important because a project usually involves changes for education and the organisation. Users can also provide advice on priorities and communication.

The outcome of a feasibility study may be that a scenario is not feasible, and alternative accommodation is not possible for the time being. In the meantime, participants will have invested their valuable time, so it's important to ensure that expectations are clear at the outset of the study. Participants are asked to think in broad terms, such as translating a future vision into general policy principles. Typically, the user group for a feasibility study consists of the school's management team.

An approach with broader participation of end users is possible by ensuring that the results of the participation process are useful even if the intended new construction project turns out to be unfeasible. This can be achieved, for example, by making adjustments to the existing situation based on the results of the feasibility study.



Organisations collectively consider what they want to organise together or separately.

Research into Collaboration Between Organisations

When various organisations decide to collaborate spatially – or in terms of content – under one roof, the first step is to conduct a round of interviews to gain a good understanding of all interests and intentions. The next step involves the "Together-Alone" workshop, in which the organisations explore together which activities can take place in a shared domain, which areas belong in their own domain, or which intermediate forms are possible. The workshop provides visibility into all activities and has a practical approach. In addition to substantive and spatial collaboration, space management and various ownership forms are also important themes which are further elaborated on in the subsequent research.

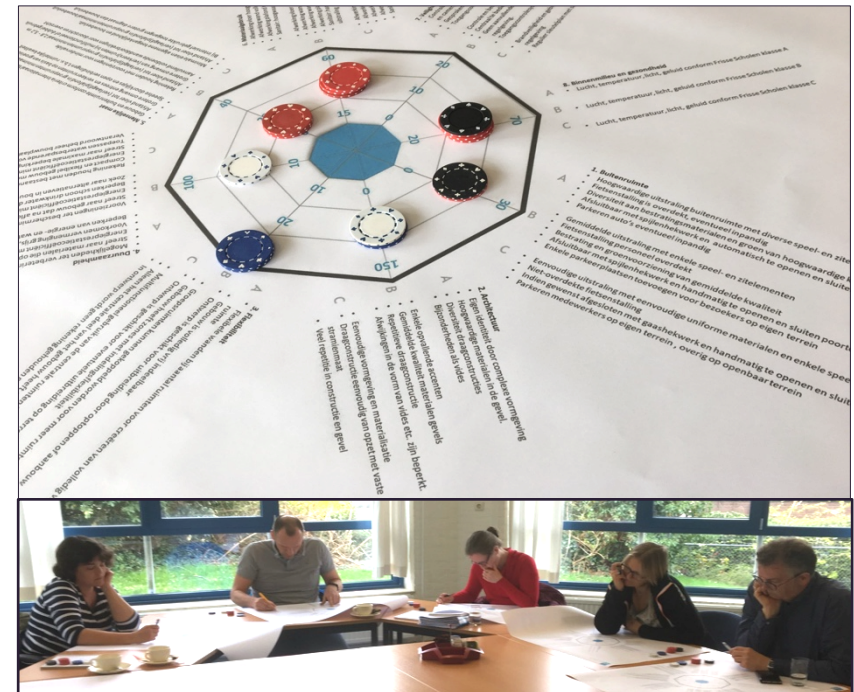
These are important decisions, and usually, in addition to users, executives also participate in the workshop. It's inspiring to see that during this workshop format, participants get to know each other better and the collaborative area grows.

Scenario thinking also applies here. If the joint use of spaces is initially limited, the building should not hinder its future expansion.

Exploring Ambitions and Frameworks by the Steering Group

Within the established construction budget, a steering group can indicate substantive ambitions and set conditions. The costs of different types of ambitions can vary greatly, but school administrators often lack the necessary knowledge in this regard. For this purpose, ICSadviseurs has developed an 'ambition workshop' which enables a steering group to make well-considered decisions, in advance, on various themes. Participants place their 'money' (chips) on one of the three desired ambition levels (sufficient, average, or extra) for each of the six different themes: design complexity; sustainable construction; quality of the learning environment; flexibility; material use; and outdoor space. For example, an elongated building shape can have a significant impact on both investments (many expensive facades) and operating costs, while investing extra in the quality of the outdoor space is relatively inexpensive but can have a significant positive effect on users.

In addition to determining ambitions, this workshop also aims to provide basic knowledge to the members of the steering group on this subject. With this knowledge, they can give the participation process an extra focus. This is especially relevant in the Dutch situation, where school boards are responsible for making these choices themselves.



The steering group considers which themes they find important. The workshop method provides immediate insight into cost implications.

Design Phase

The focal point for user input is in the design phase: the development of a Spatial-Functional Programme of Requirements which supports the school's educational vision. Chapters 7, 8, and 9 of this book focus primarily on the design phase.

Architect Selection

Almost every schoolbuilding project requires a European procedure for architect procurement. This procedure comprises various phases: preparation phase, publication phase, selection phase, evaluation phase (also known as the award phase), and contract phase. In general, the selection process has a minimum duration of 3 months.

Schoolbuilding can be organised in various ways, with different implications for user participation, cost control, and process flexibility. The choice is also related to market conditions: in cases of rapidly rising costs, the client's need for price certainty increases, but builders may be less willing to take risks. In the Netherlands, the 'Traditional Construction Organisation' is the most common form. This model involves a strict separation of design and execution. Within this framework, there are variations in the architect selection process.

The variant in which the architect begins design work only *after* contracting is the most common. During the award phase, the selected architects may be asked to provide a substantive vision on the school's requirements. The information needed for this can remain at a high level, for example, an initial output of the Programme of Requirements, including the educational vision, general principles, atmosphere images, spatial layout, and surface area calculations based on benchmarks. The detailed Programme of Requirements is only needed after contracting the architect. From a user participation perspective, this is the best variant, as it provides more time to develop the Programme of Requirements and allows users to get to know the architect and collaborate during the design phase.

Another variant is one in which the architect is contracted through a 'design competition' procedure. In this approach, a complete design is requested. The possibilities for user participation are more limited in this variant. The information required by the architect must be as complete as possible during the award phase, and users have less influence on the design during the design process because it is already detailed.

In addition to the traditional construction organisation, various other forms exist, such as 'Design & Build'. This is a construction organisation form where not only the architect, but also other construction parties are tendered as a consortium. The consortium's offer consists of a fully developed design with a fixed price. User

influence is limited, mainly focusing on the Programme of Requirements, which should be well thought out and detailed. Flexibility is limited, because changes to the detailed design result in additional costs, while cost control is often the reason for choosing this construction organisation form.

There are many more construction organisation forms, but all of them have the same disadvantage concerning user participation. The Building Team organisation is an exception. This form is used, for example, for complex renovations of existing buildings where it is unclear what challenges the building team may encounter during the process. Users can be represented in the building team.

Preliminary Design

A successful transfer of the Programme of Requirements to the architect is crucial for the quality of the design. One possibility is to involve a representation of the Programme of Requirements' authors in the evaluation of the initial design sketches. Effective methods exist for user groups to evaluate the design. Participation in this phase has the advantage of giving users a concrete understanding of what they had formulated earlier as their starting points.

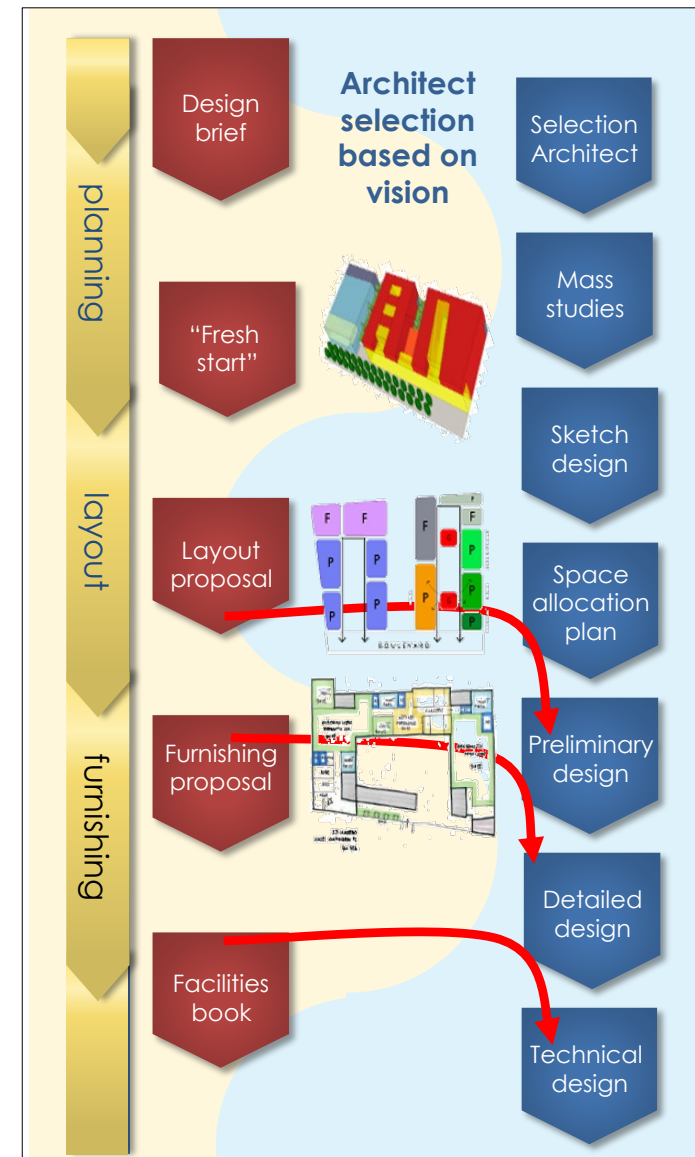
A more extensive form of participation is having the architect create an overall plan (or 'structure plan') for the design based on the Programme of Requirements, in which the educational areas are indicated as empty spaces. Groups of users can then be involved in developing their own areas.

Final Design

Teachers and Teaching Assistants (TOAs) are involved in the detailed planning of their own subject classrooms or laboratories. This includes the final layout of educational spaces and the fixed installations of machinery, laboratory tables, sinks and the like. Practical experience from teachers is essential to generate good layout proposals. Suppliers can often bring valuable knowledge and expertise to this phase.

Execution

Students and teachers can monitor the progress of the construction and learn from it. Expanding an existing school building always causes disruption, not only in terms of noise but also due to dust. Involvement of students and teachers, for example, through the placement of webcams, visits to the construction site, or interviews with construction professionals in the classroom, can make it easier to accept the disruption.



In the Netherlands, there are many opportunities for participation during the design phase. A preliminary design defines the "spots."(space allocation). This leads to a Preliminary Design. Subsequently, the final layout for each spot is determined in collaboration with directly involved users.

The construction process includes various milestone moments, such as 'breaking grounds', the first pile, laying the first stone, reaching the highest point, completion, and opening. The school can decide to celebrate these milestones and turn the construction into a festive event.

Evaluation and Getting Used to the Building

A new school building often requires a change in user behavior. For example, it may be necessary to adapt to the new learning and working environments or to address any initial issues and make adjustments. Participation remains crucial during this phase. Provide room for questions, collect complaints and establish an adaptation period during which no significant changes will occur. Monitoring the use of the building and communicating with users is essential for the acceptance of the new learning environments. Some users may only fully grasp the educational vision underlying these new environments during this phase, making effective guidance even more valuable; it is part of the implementation of the desired educational innovation.

7.3 What do you want to know in advance?

Kick-off Meeting

- What do you, as an advisor, want to find out during the kick-off meeting with the school? Or in other words, what should school leadership consider at the start?
- Getting to know each other and the action plan (process design) are the most important topics. In this chapter, we will go through the discussion points of a kick-off meeting.

General Questions

- Where does the school 'come from'? Does the school have a clear vision of where it wants to go? And in what ways does that differ from current practices?
- What is unique about the school? And about the target groups and the environment?
- Does the school have a recent educational vision, and is it known to everyone? Or is there a workgroup working on it?

- What is the new curriculum like? Is there a (new) timetable?
- How many students/pupils are there now, how many will there be in the future, and how are they distributed across years and educational units?
- What is the school's stance on participation? What is the goal? Who is participating? What are the key points and sensitivities?
- A tour of the school also provides a lot of information.

Questions about the Approach (Process Design)

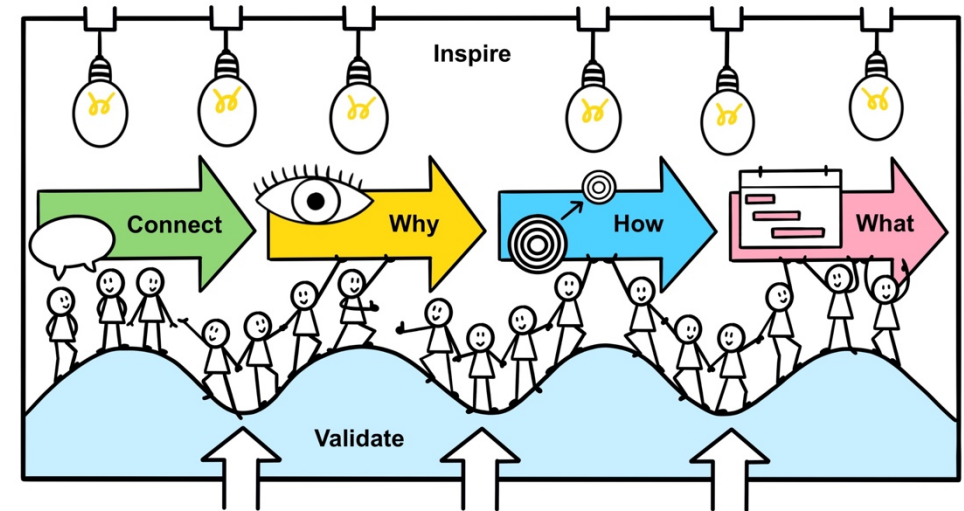
- What frameworks need to be considered? For example, has the municipality already determined the total square footage, and how was it calculated? Are there any obstacles in the surroundings, such as noise or safety issues?
- How much time is available? Often, plans are put on hold until they receive the green light, and then things need to move quickly: for example, within 2-4 months.
- Has an architect already been selected, or is the selection process still ongoing? When will this be concluded?
- Can certain priorities within the budget already be identified that need to be taken into account in the process? For example: sustainability, outdoor space, learning environment, or an distinctive appearance? Is there interest within the steering group in an ambition workshop?
- How much room is there in the Technical-Facilitary Programme of Requirements to make choices? In the Netherlands, this is common practice and is also part of the inquiry during the architect selection process because it impacts costs and quality.
- What are the initial ideas about communication/participation? And about the organisation of the process?

7.4 Steps in the Process

The participation process (in this handbook) is divided into three phases, each with its own objectives. It is based on Simon Sinek's Golden Circle, which distinguishes between 'Why, How and What.'

The workshops in this handbook are organised based on this principle and supplemented with the phases 'Connect' and 'Validate.' In addition, two components have been added that are applicable to each phase: 'Inspire' and 'Waves.'

- Connect:** Connect participants with each other and with the overall goals and prerequisites of the participation process.
- Why:** Encourage an open-minded approach and allow room for all ideas to explore the questions. Utilise the diverse qualities of the participants.
- How:** Explore different models or scenarios which can provide an answer to the "why" question.
- What:** Apply the results to concrete situations and reexamine them, with the possibility to reconsider the assumptions still available.
- Validate:** Test the results by seeking external feedback to ensure credibility and make better decisions. Input from non-participating users can be particularly valuable. A study trip serves as both validation (how have they done it?) and inspiration (new ideas).
- Inspire:** Infuse external information at every step of the workshop to inspire participants and broaden their perspectives.
- Waves:** The blue waves in each phase represent divergence (opening, expanding) followed by investigation and convergence (closing, concluding). This well-known workshop principle applies to each intermediate step as well as to the entire participation process.



Variations for Combining Meetings

The 'Why, How, What' phases can be conducted as separate meetings or combined. The choice of a particular setup is often determined by availability in the school schedule and may not always be the best option. Therefore, try to start thinking about about the meeting schedule as early as possible.

- a) Three meetings, three hours each
There are approximately three weeks between meetings, allowing time to prepare and discuss reports within the core group. Between these meetings, participants typically remain less engaged and energy levels decrease, necessitating a fresh start at each meeting. After each meeting, core group meetings can be scheduled to evaluate the interim results. The first meeting ('Why') can still be slightly abstract for some participants because the investigation into the consequences ('How') is still pending.

- b) The first two meetings ('Why and How') are combined, for example, on a (study) day or an afternoon to evening session.
The advantage is that the group's energy leads to extra creativity. Conclusions are already on the table, eliminating the need for interim reports. After investigating the second phase ('How'), participants see the connection between vision and implementation and can still adjust the assumptions. The results are developed into different scenarios during the time between meetings.
At the 'What' meeting, the results of the workshops are discussed, followed by a strengths-weaknesses analysis of the developed scenarios. The final scenario often incorporates elements from different scenarios.

- c) Plan the three phases ('Why, How, What') consecutively: for example, during a 24-hour meeting from Friday 13:00 to Saturday 13:00 the next day including a good night rest of course)..
This approach provides a wealth of information. Starting with free thinking and ending very concretely, this approach is highly satisfying for participants and, of course, saves time. The night allows the first two rounds to settle, enabling a fresh start the next day, discussing loose ends, and becoming more concrete.

Inspiration and Validation on a Study Trip

A study trip is valuable for testing the vision developed in the workshops against the practices of another school and exchanging thoughts about the findings of the participants. It serves as both inspiration and validation. By planning this trip after the first phases 'Why' and 'How,' or after all three phases, it becomes clear which examples to visit are relevant to the project and where exactly the questions lie. Using an observation guide with observation points, participants can focus on specific aspects of the schools to be visited.

A study trip at the very beginning of the process, without prior reflection, carries the risk that participants may 'shop around' and make choices without a good understanding of the underlying considerations.

In the 24-hour variant, if the study trip is scheduled after the workshops, an additional 'What' meeting follows to reflect on the outcome of the workshop and the findings from the study trip.

Inspiration

A travel destination doesn't necessarily have to be the same type of school as the participants need; it can also be related to a similar theme. For example, transparency, integration of subjects in a learning plaza, or the experience of a specific space.

8. THE WORKSHOP

Seeing Differences as an Advantage

Users differ from one another. The art of participation is to adopt an approach that views this diversity as an advantage and invites all participants to contribute their expertise and ideas. In this way, the participation process results in a rich and diverse outcome, and participants can recognise themselves in the choices being made. This section describes types of differences.

Differences in Personal Focus, Interests and Perspectives

Every user has their own perspective, a way of looking at things and a belief in what is important. These differences usually complement each other and together provide a complete picture. Approaches such as future orientation, organisational skills, people-centredness, decisiveness, results orientation, or attachment to traditions can quickly lead to discussions but are not contradictory: they all contribute to the outcome.

The workshop overview provides a brief description of the "PrismaTisch" method. This method is specifically designed to make the best use of different perspectives. The Erasmus+ project MOBI.LE deals extensively with this approach.

Age differences

Different age groups have different needs and preferences when it comes to the learning environment. Taking age into account doesn't always require separate workshops; the themes can be the same but developed in different forms or questions within the same workshop. For example, in a workshop for parents, children and teachers, the children were asked to create collages about "Where do you like to play with your friends?" at the same table where parents were contemplating the theme of "meeting." The two groups inspired each other!

Idea Box for Children (and Parents!)

For an international school, children were tasked with submitting an idea for the idea box. They were also allowed to work on this at home. It was clear that some of them were helped by their parents, but that was perfectly fine, of course!

Representative Representation

Always ensure (including with young people) a representative representation with a diversity of opinions.

Student Panel

A vocational school made plans and presented the plans to a student panel. Under the guidance of the principal, a lively discussion ensued. A perfect example of a validation meeting.

Young Children Take Photos

On an elementary school field trip, pupils were asked to take photos of everything they thought was beautiful.

The presentation was very interesting, also due to the lower eye level of the photos and the surprising subjects that adults often overlook.

Space as a Limitation

The design of the learning and working environment is highly relevant for users with disabilities. Unfortunately, practice shows that it is not automatically well-regulated, despite the existing regulations in this area and the certificates that have been awarded.

Consider, for example, wheelchair accessibility (including evacuation without a lift), as well as sensory impairments (poor vision and hearing), neurodiversity, and phobias. There are various examples of the latter, such as people with acrophobia who can become very stressed by spectacular heights, voids, and floor-to-ceiling windows. Or think of students with ADHD who, despite good preparation for the exam, cannot function well and perform below their level in a large exam room. Learning environments can support learning, but they can also pose obstacles.

Looking at a space from the perspective of limitations requires extra attention and empathy, but it makes the space better for everyone.

Differences in Learning Styles

Users have different learning styles. A well-known model is Neil Fleming's VARK model, which distinguishes four different learning styles:

- *Visual*: Learners who are visual prefer using images, diagrams, graphs, and other visual elements to understand and remember information.
- *Aural*: Learners who are aural prefer listening to information. They understand and remember information better through spoken words, explanations, and discussions.
- *Read/Write*: Learners in this category process information best by reading and writing it down. They like to take notes and work with written text.
- *Kinesthetic*: Learners who are kinesthetic learn best through physical activity and practical experience. They need hands-on activities, movement, and the use of their senses to understand and remember information.

These differences apply not only to students but to all participants in the workshop. A variety of workshop formats makes it possible to cater to different learning styles. For example, participants can write texts, search for images, build models, listen, discuss statements, write newspaper articles from the year 2035, and make films. In the case of a large number of participants, it may be considered to allow participants to sign up for different workshop formats which take place simultaneously. A combination of text and images in a workshop is always a good idea.



Stoepkrijt

In een oude fabrieksruijnte konden deelnemers werkomgevingen met krijt op de vloer tekenen.t.

In addition to the VARK model, there are other models which describe differences in learning styles or talents. Each model offers a different perspective on how individuals process information and learn. They also emphasise the importance of differentiation in education to accommodate the diverse learning styles of students.

Introvert - Extrovert

People have different personality traits which can influence their participation in the process: for example, introversion and extroversion. Many workshop methods take this into account, such as the 'PrismaTisch' and the 'Silent Wall' methods, where participants write down their thoughts and respond to each other in writing. This is also a good way to break hierarchical relationships.

Familiar or Unfamiliar

A group that has known each other for years is different from a group in which everyone is new. In a group of acquaintances, various habitual patterns have developed. This can be challenging, because they may prefer to talk to each other about work rather than working on the assignment.

More involved, less involved

Study trips, research and workshops are usually carried out by a Learning & Learning Environment workgroup (or 'Development Group'), which, as a result, builds up an increasingly greater knowledge advantage over other colleagues. Within the workgroup, members discuss common reference images and are positive about solutions which others cannot visualise.

A pitfall is that members of the Learning & Learning Environment workgroup may, in their enthusiasm, present detailed and concrete solutions to others, leading to accusations such as: "They've already figured everything out!" It's better for the workgroup to first develop the main lines and principles and present them at a validation meeting using positions. Subsequently, employees can be invited to investigate how their own learning environment can function and look within the contours of a sketch plan. They make use of the jointly established principles. Photos from the study trip and other images can serve as inspiration.

Difference in Position in the School's Organisational Structure

The sense of hierarchy varies from country to country. A person's position in the organisational structure can influence their input and influence in the participation process. Additionally, a preexisting conflict over a completely different topic can suddenly resurface in the workshop. Sometimes, it's good to know in advance what is going on.

We're building a school!

Visiting

Two schools in Helmond merged and jointly made plans for a new building. Getting to know each other better was also a goal of the participation process. There were two workshop afternoons, during which both schools were used as locations. On both occasions, the visiting school received a warm welcome from the other school (with snacks and drinks) and a tour to show how they worked there.

Enthusiasm for Architecture

Teachers may sometimes have a personal interest in architecture and come up with concrete proposals. It's good to discuss this and to jointly analyse the ideas. Following this, it's the 'art of participation' to distinguish design solutions from the underlying ideas about pedagogical architecture. The latter can be subsequently introduced into the participation process.

For visual arts education, a schoolbuilding project offers many opportunities, such as designing furniture, futuristic learning environments, lectures by architects, or ideas for the outdoor environment. Other school subjects, like biology, may also identify opportunities, such as ecological zones, while physical education may involve exercise equipment or climbing walls. In certain schools, the study of physics has even resulted in the construction of a small dome for a telescope.

8.1 The workshop location

A conference centre or meeting venue

A workshop is definitely not a meeting. Meeting venues are often expensive and usually not very inspiring.

Space in different zones

A large space creates a lively atmosphere, facilitates exchange, and allows the facilitator to have a better overview. The space can be divided into different zones, with separate tables for group work and a large worktable in the centre. In addition, an exhibition of all the results can be set up near the entrance, combined with a table for snacks and drinks. This way, participants can walk past the results with a snack in hand and enjoy them together.

At school

Within a school, there are always large spaces available, such as a cafeteria or a gymnasium, and there are always plenty of tables and chairs. The downside is that teachers may use the break to catch up on schoolwork.

Inspiring location

What is considered inspiring is, of course, subjective. It helps if the location exudes a relaxed atmosphere and if participants can come in informal attire.

Special location

A workshop in the barn of a farm in Dinxperlo, 20 years ago, is still etched in my memory, because the chickens strolled cheerfully between the tables!

Gift at the Start

Usually, a gift is given at the end, providing a positive closure. But it can also be done the other way around: give participants a gift when they arrive. This immediately contributes to a good atmosphere and a positive start to the meeting (and be generous: give a gift at the end too!)."

Upon arrival, participants receive a Toblerone with a wrapper on which they can write their name. The wrapper contains the programme components, which can be 'consumed'...

Inspirational Dinner

I once asked a school in Groningen to organise an inspirational meal themselves. The group certainly had an experience to remember! We arrived at the restaurant and were warmly welcomed with candies and coffee. For the starter, we were served a cheese platter. Then came ice cream sundaes, and that's when it dawned on us... Indeed, after the main course, the last course was soup! The conversation then revolved around this reversal, and truly, none of us had ever consumed a meal in reverse order. This got us all thinking about how we often aren't even aware of fixed patterns.

Walking workshops

My first walking workshop was out of necessity: our venue option was no longer available. We organised a tourist walk through Utrecht for all participants, with questions about learning & learning environments in a walking guide, interspersed with tourist information about the places we passed. The walk was done in pairs, with the composition changing after each tourist stop. Participants were very positive about this afternoon, but also mentioned that we were very lucky with the weather."

8.2 Energy

"Collaboration, Future-Oriented Thinking and Creativity

As a facilitator, it is important to observe and manage the energy within the group, as it can influence the course and outcome of the meeting or workshop. Some indicators of positive energy in a group can include:

- Active participation: Participants actively engage in discussions, ask questions, share ideas and show interest in each other's perspectives.
- Collaboration: Participants work together, listen to each other, support each other's ideas, and build upon each other's contributions.
- Open communication: The atmosphere is open and respectful, and participants feel free to express their thoughts and feelings without fear of judgment or rejection.
- Positive emotions: Participants display enthusiasm, enjoyment, and engagement in activities and discussions.
- Constructive challenge: Participants challenge each other, ask critical questions and encourage each other to think deeply and explore new perspectives.

When I walk round the room during a workshop, I keep three words in mind to assess the atmosphere and energy: collaboration, future-oriented thinking and creativity. If any of these aspects are missing, I investigate what's happening.

Teamwork in construction

A construction team celebrates the completion of a building. But a celebration can also take place at the beginning of the process, at a special location. For example, all participants can share something about themselves, using an object. The school can also provide more background information on why this construction is so important. This way, everyone benefits from this throughout the entire duration of the construction.

Alternative to a Lengthy Introduction Round

Place the four cardinal directions on the four walls. Request everyone to position themselves in relation to the center of the room, based on where they come from. Ask questions to stimulate interaction, such as: Who travelled for more than two hours today to get here? Who here works in vocational education? Who has a lot of experience with today's topic?

INTRO mnemonic

Useful to clarify what you want to achieve with a task and convey to the participants:

- Interest: getting attention, rousing curiosity
- Need: why is this important to you?
- Time: how long will we work on it?
- Response: what is the task, what do you expect from the participants?
- Objectives: what will we learn/know/understand through all this?

Think about the energy when creating the programme

I'd like to share here my personal tips on the energy flow of a workshop day. Of course, personal preferences may differ. Nevertheless, when creating a workshop programme it's important to consider the energy flow throughout the day.

- Start with an energetic kick-off to immediately engage and excite the participants. Instead of a round of introductions, you can use name badges and a participant list.
- Ensure a variety of activities and formats to maintain high energy levels. Think of group discussions, brainstorming sessions, creative exercises, and interactive games. Alternate these with explanations and theory, but limit these to a maximum of 15 minutes at a time.
- Provide a mix of activities where participants can alternate between walking and sitting.
- If the programme continues into the evening, after the evening meal can be a suitable time for reflection or a presentation.
- Avoid plenary presentations, lectures, or long rounds where everyone shares something. Or make this an inspiring, separate segment before the workshop programme: for example, a presentation of photos from a study trip.
- Schedule regular breaks for participants to relax and recharge. In addition to coffee, tea, juices and soft drinks, you can offer fruit, biscuits, crisps, and, if you don't mind the mess, peanuts in the shell. Ensure that breaks are planned so that participants who finish their task early can start their break.
- Keep breaks relatively short to maintain momentum.
- Display the collective results on a large table and discuss them in a circle around the table to enhance the sense of community.
- Conclude the meeting with a positive and inspiring closure, leaving participants with a good feeling. Don't forget to discuss the follow-up, communication and follow-up.
- Multi-day meetings, such as the previously described "24-hour" or a multi-day study trip, have a significant additional impact.



Study Trip Abroad

A school in Barneveld had a keen interest in how architecture can provide inspiration. The architects proposed a study trip to Granada and Cordoba. It was during one evening on this trip that the idea for the building was conceived in a way that could not have happened otherwise.

The cost of the trip amounted to 0.05% of the construction budget, but the impact was highly significant.

9. WORKSHOP SHOW

9.1 Introduction

Why These Workshops?

The selection of workshops in this chapter has been frequently applied in practice. It offers a variety of workshop formats. These workshops serve as building blocks for shaping a participation process. Use the examples as inspiration to devise your own variations. The collection will undoubtedly continue to expand. The workshops themselves do not require any special resources.

How are the workshops in this chapter organised?

The workshops are categorised according to the design of the process: Connect, Why, How, What, Validate.

Validation is mentioned last, but is particularly effective when carried out at different stages of the process. This allows the results to be more easily integrated into the (design) process.

Study Day in detail

A detailed example of a participation trajectory can be found in "MOBILE (Mobilising Learning Environments)." For this specific process, special resources are available, such as inspirational photos, an evaluation tool, and an Index of Learning Environments with 200 thought-provoking questions about the future.

9.2 Workshops by category

Workshop overview

CONNECT

- GIFT AT THE START
- WHAT INSPIRES ME
- MY FAVOURITE PLACE TO LEARN
- INTRODUCTION THROUGH DNA PICTURES

WHY: Vision and principles

- DNA-RESEARCH
- LEGO-VISION
- TOGETHER AND APART
- NEIGHBOURHOOD IN FOCUS
- PRISMA-TABLE
- THE EXCELLENT SCHOOL
- TIME TRAVEL

HOW: Strategy and scenarios

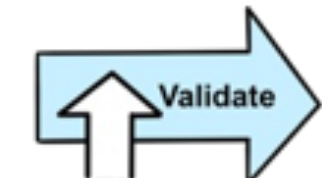
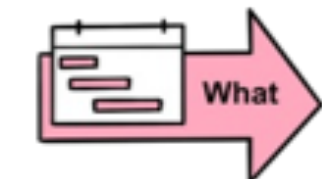
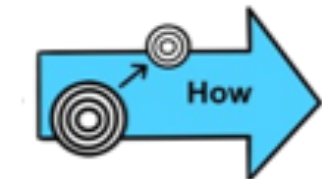
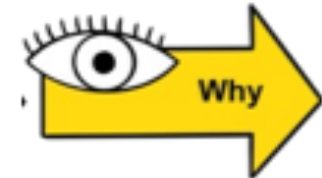
- MODEL DEVELOPMENT
- SELL AND EXPLORE
- EXPERIENCE THE PLAN
- THE FOURTH TABLE

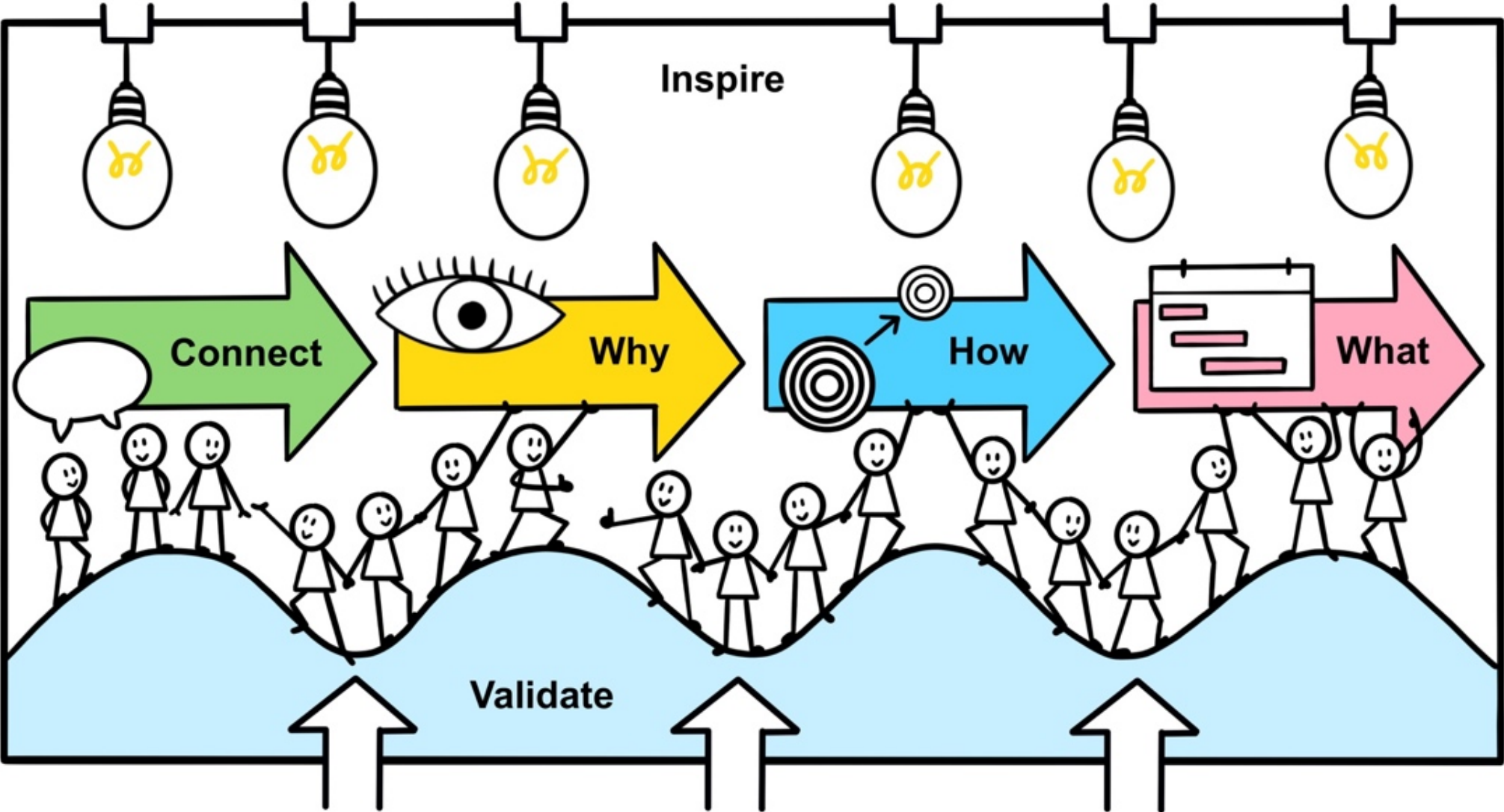
WHAT: Concretise

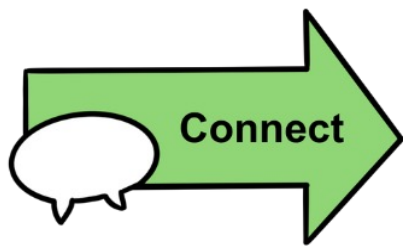
- WHAT DO YOU DO IN 24 HOURS?
- THE FOUR SEASONS
- NOW, HOW, WOW...POW!

VALIDATE: Feedback

- STRESS TEST
- OBSERVATION GUIDE







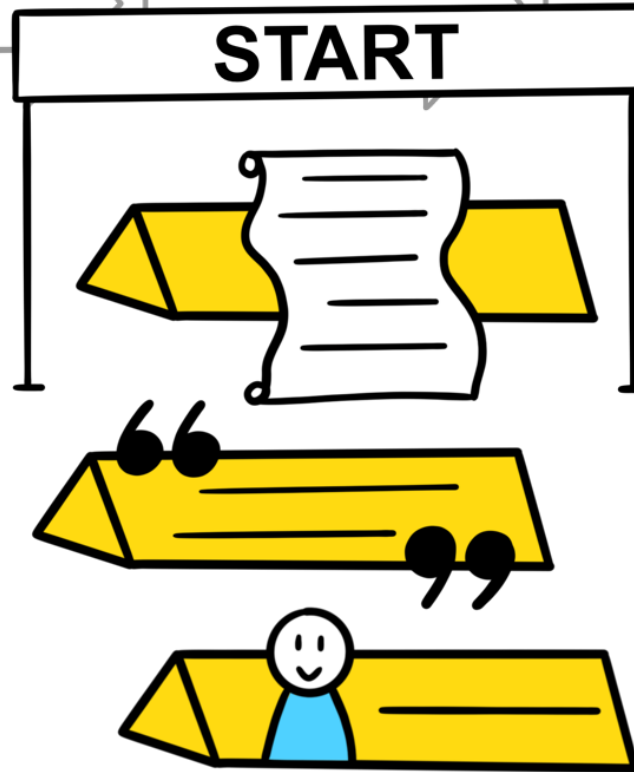
GIFT AT THE START

CENTRAL QUESTION, GOAL AND RESULTS

"Who are you? And do you know what time to be where?"

Great workshops offer diverse programmes and promote open thinking. To maintain a productive momentum, it's important to have a clear programme and keep track of time.

As a special gesture, participants will receive a gift right at the beginning of the workshop, as it has a more significant impact when received early rather than at the end. The gift is a Toblerone with the programme details printed on one side. On the other side, participants can write their name and their chosen inspirational quote, or any other text they find meaningful.



PREPARATION AND INSPIRATION

Create a programme wrapper that fits the entire schedule on half of an A4 page. This wrapper is then rolled around the Toblerone. Use various colours of paper and display the Toblerones on a table near the entrance for easy access.

Let participants choose a colour. Also hand out markers and make sure they are of medium thickness.

DO'S AND DON'TS

Welcome the participants from behind the table with Toblerones and hand them the materials.

The first impression immediately makes participants smile.

Especially suitable for a study day or 24-hour workshop consisting of several parts.

Beware: Consuming 1 Toblerone per day (100 grams) leads to a weight gain of 27.5 kg per year.

ALTERNATIVES

Alternatives without chocolate may be desirable, for example a tube in which pens can be stored. Instead of the self-selected quote, the school's core values could also be given an appropriate place here.



INTRO

5 M Entry of participants, greeting each other and choice of Toblerone.

BODY

5 M All participants are required to jot down their name and additional information.

FINAL

WORKSHOP CARD

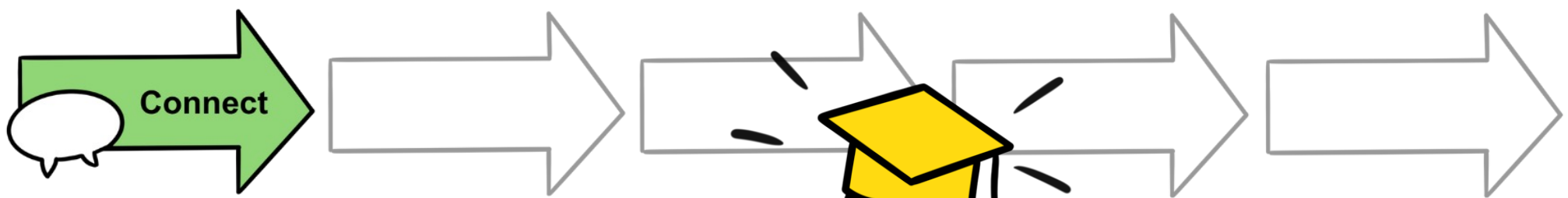


12-100 Persons

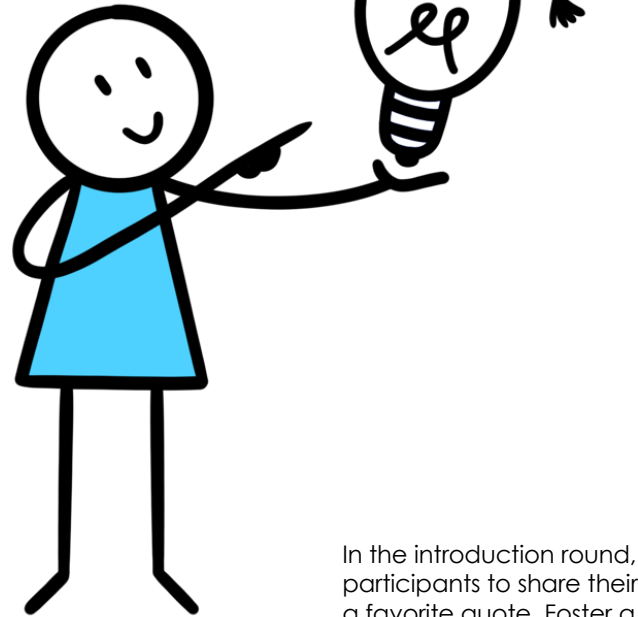


10 Minutes





WHAT INSPIRES ME



CENTRAL QUESTION, GOAL AND RESULTS

"What serves as a source of educational inspiration for me?"

The goal is to actively involve participants in sharing their personal perspectives on education, right from the beginning. This approach not only creates a captivating and unexpected introduction but also sets a positive tone. It provides a unique invitation and underscores that the workshop's foundation is rooted in the participants' educational visions.

PREPARATION AND INSPIRATION

Request all participants to reflect before the workshop on an inspiring quote.

Include examples of quotes in the invitation, or provide a link for reference.

DO'S AND DON'TS

Request participants to write their name and chosen quote, either on a badge or a Toblerone.

In the introduction round, invite participants to share their name and a favorite quote. Foster a relaxed and engaging atmosphere, and encourage several of the participants to elaborate further on their chosen quote.

Additionally, include a list of participants and their respective areas of responsibility along with the invitation. This format is particularly well-suited to initiating a study day or a 24-hour workshop.

This workshop serves as a stepping stone; vision development can be the next step.

Incorporate some compelling or recurring quotes into the report.

ALTERNATIVES

The quotes are displayed as a prominent mobile in the Rhein-Maas Zentrum's stairwell, which is a part of ZfSL Düsseldorf. Workshops held at this location begin with participants selecting their favorite quote from the stairwell. Additionally, the quotes are accessible as PDFs and will be included in the workshop invitation.



INTRO

10 M At the entrance, participants receive a badge or Toblerone, on which they write their chosen quote.

BODY

20 M Brief welcome speech. Some elaborate on their favourite quote.

FINAL

10 M Explanation of the programme

WORKSHOP CARD

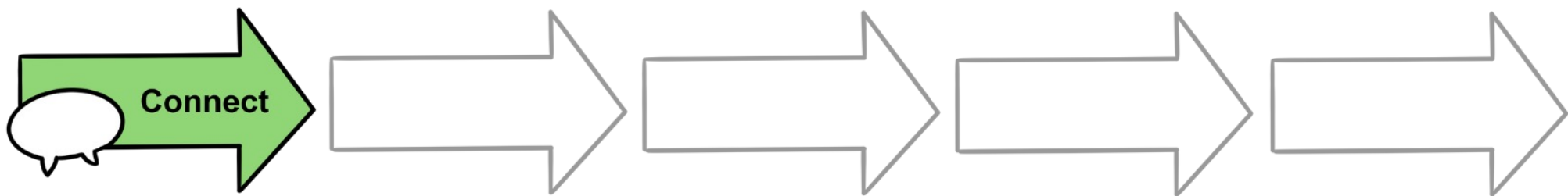


12-36 persons



30 Minutes

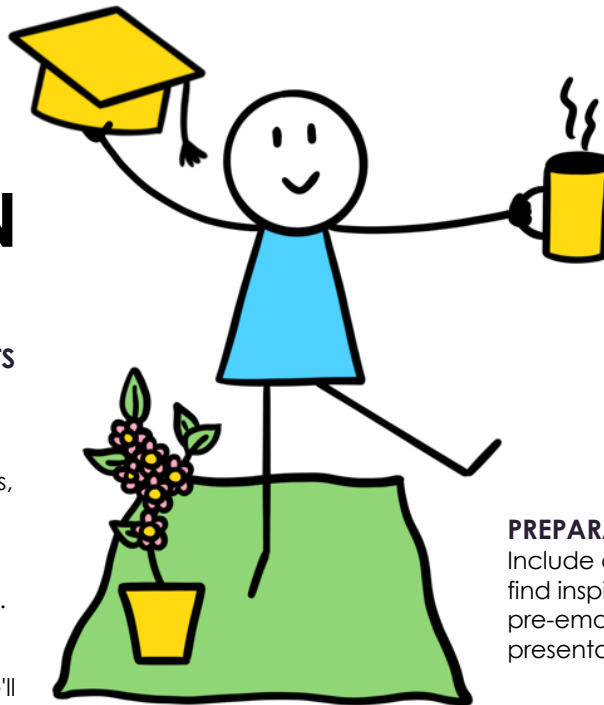




MY FAVOURITE PLACE TO LEARN

CENTRAL QUESTION, GOAL AND RESULTS
"Where do I learn best?"

When first developing design specifications, it's beneficial to significantly expand our perspectives. To achieve this, we invite everyone to email a photo of their favorite learning place before the kick-off meeting. This place could be anywhere: a school, home, a vacation spot, while travelling – anything goes. During the introduction, we'll ask each participant to explain why they find this place conducive to learning, ensuring a delightful start and emphasising that learning can happen in various environments.

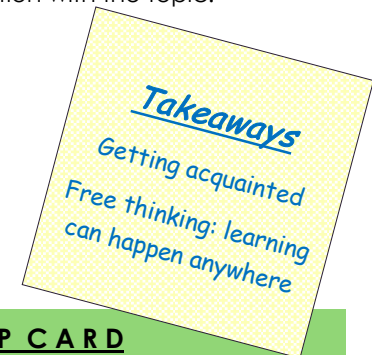


PREPARATION AND INSPIRATION
 Include a link where participants can find inspiring photos. Incorporate the pre-emailed photos into a presentation.

DO'S AND DON'TS
 It's possible that not everyone has completed their homework or may not have had the chance to take a photo at the last minute.

This section is not an end in itself; vision development will occur in subsequent portions of the workshop. Include some captivating or recurring quotes in the workshop report. In the beginning of a participation process there's ample room for ideas, but as we progress, the space becomes increasingly limited. That's why it's crucial to think freely in the beginning. Inquire further about what makes this place particularly conducive to learning. Please ensure that the explanations remain concise.

ALTERNATIVES
 There are multiple approaches to sharing information about yourself in connection with the topic.



INTRO	BODY	FINAL
5 M After a brief welcome speech, the workshop can begin.	20 M Brief explanation. Maximum 1 minute per person.	5 M On to the follow-up programme.

WORKSHOP CARD

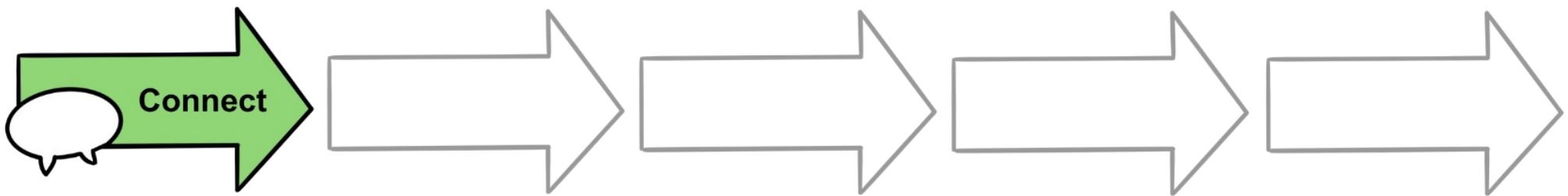


12-36 persons



30 Minutes



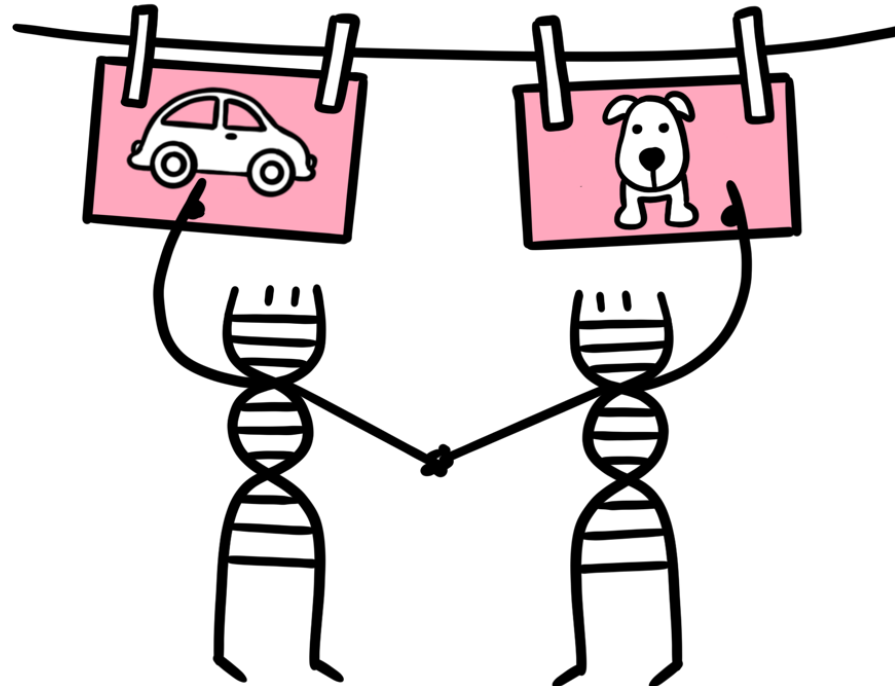


INTRODUCTION THROUGH DNA PICTURES

CENTRAL QUESTION, GOAL AND RESULTS

"What will be our future DNA?"

Participants are presented with a selection of various images (such as animals, cars, board games, etc.) ahead of the kick-off meeting. During the introduction round, they share which card they chose and, more significantly, their reasons for the selection. This approach shifts the focus to how they envision the organisation's development. It enables sensitive subjects to be discussed openly from the outset, fostering a transparent and open atmosphere



PREPARATION AND INSPIRATION

Include the question "What will be our future DNA?" in the invitation as a pre-meeting task. Also, provide a link to a location where they can access the pictures.

DO'S AND DON'TS

Each participant briefly presents their chosen photo.

Try to refrain from engaging in discussions at this point, as there will be an opportunity for that later in the workshop.

The opinions may vary significantly. Conclude then that this aligns with our intentions, as the new building will be designed to accommodate these differences.

ALTERNATIVES

There are different ways to talk about yourself in relation to the topic. See also "What inspires me."



INTRO

5 M After a brief welcome speech, the workshop can begin.

BODY

20 M Maximum 1 minute per person.

FINAL

5 M On to the follow-up programme.

WORKSHOP CARD

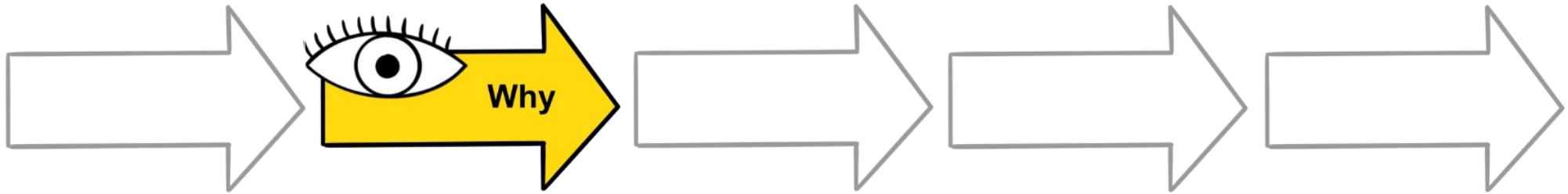


12-36 persons



30 Minutes



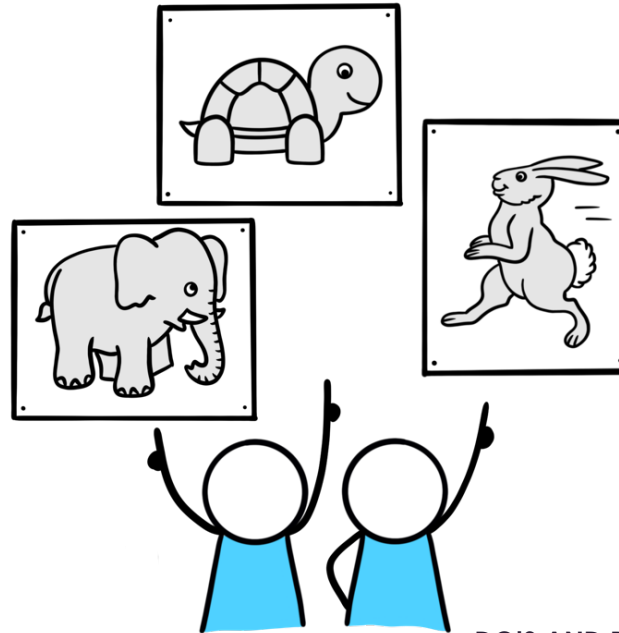


DNA RESEARCH

CENTRAL QUESTION, GOAL AND RESULTS

What defines our organisation's DNA? Are we akin to a brown bear, a playful puppy, or a Jaguar? Perhaps we resemble a Volkswagen, a Porsche, or a Tesla? And why?

This workshop serves as an excellent opportunity for a collaborative, content-rich, and creatively engaging kick-off meeting. It begins with an open conversation about our organisation's DNA, followed by an informative section outlining the project's approach. The insights gathered can inform the selection of architects and be integrated into the 'Phase Zero' process. After all, architects must have a deep understanding of the desired culture and ambiance for the new building.



PREPARATION AND INSPIRATION

Participants are not required to prepare in advance. The facilitator will provide mood boards with attractive images and arrange them on a long table.

DO'S AND DON'TS

In the introduction, share with participants compelling instances where this DNA information has played a pivotal role in design. When using mood boards, consider featuring themes like animals, cars, travel, board games, etc., instead of buildings as examples.

ALTERNATIVES

Arrange the mood boards on a long table or position them on tables arranged in a spacious circle within the room to allow participants to explore all the mood boards. This workshop is also adaptable for larger groups, even exceeding 100 participants. In such cases, participants can immediately form small workgroups, each assigned to one mood board, where they can affix Post-it notes. Subsequently, the groups rotate to the next table, studying the work of the previous group. Combining this information with their initial thoughts, they can draw inspiration to craft a compelling text, which they then present to the entire group.



INTRO

10 M The facilitator provides a clear explanation and asks the central question.

BODY

20 M Participants move along the mood boards, choose a picture for each mood board and write on a Post-it why this picture says something about the school's DNA.

FINAL

40 M Each group (2-4 people) is given a mood board and reads what is written on it. They then write a short and very inspiring text about the school's DNA.

WORKSHOP CARD

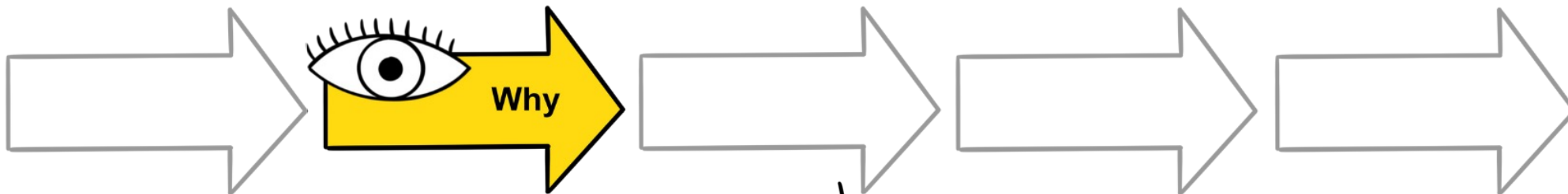


12-36 persons



70 Minutes





LEGO-VISION

CENTRAL QUESTION, GOAL AND RESULTS

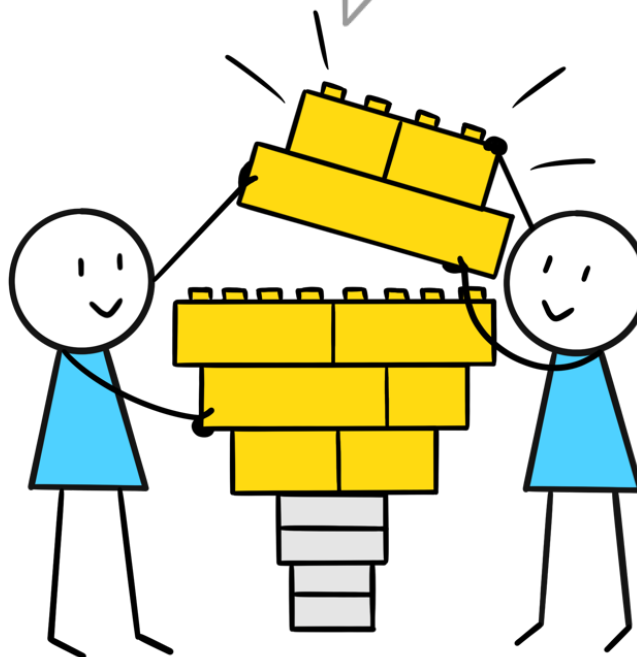
"If anything is possible, what would you like to achieve?"

Participants craft their visions using LEGO bricks. The act of playing fosters creative and associative thinking. These 'constructions' act as metaphors for conveying goals, needs, interests, and ideals. Through this user-friendly approach, participants are encouraged to openly discuss their aspirations. This activity also serves as an effective icebreaker and instills a sense of collective progress.

The "constructions" serve as metaphors to express goals, desires, interests, and ideals.

PREPARATION AND INSPIRATION

Prepare a collection of different stones for each participant.



DO'S AND DON'TS

Ask participants to envision their ideal learning environment. Don't think too much about buildings; it can also be an artwork about future learning.

Each participant works individually. To break the ice, begin with a brief warm-up task. For instance, challenge participants to make a duck out of LEGO, using no more than 7 bricks in just 1 minute. Alternatively, see who can build the tallest, free-standing tower. Engage with some of the participants to help everyone get into the creative spirit.

Capture photographs of the results and compile a brief report. This adds visually appealing illustrations to the documentation. It's possible that, three years down the line, you may discover that the initial idea stemmed from here.

ALTERNATIVES

Instead of Lego, you can also utilise various craft materials, although this approach may require more time and lacks the same flexibility for rapid changes. When working in groups, it can be engaging to collaborate on a large project using recycled materials, with the primary goal being team-building.



INTRO

5 M Brief explanation of intent.

BODY

5 M Warming up. Make a duck. Make a tower.
10 M Create your ideal learning environment.

FINAL

15 M Each participant gives a brief explanation.
5 M Feedback.

WORKSHOP CARD

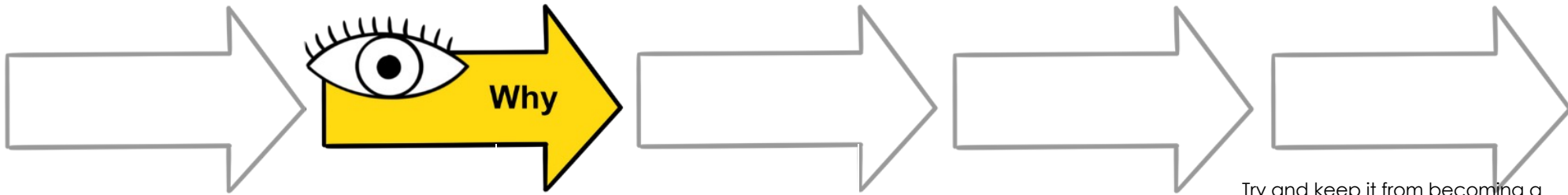


12-36 persons



40 Minutes

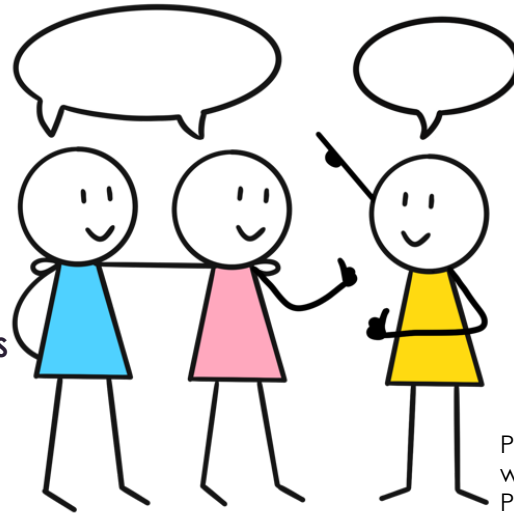




TOGETHER AND APART

CENTRAL QUESTION, GOAL AND RESULTS
Where do we want to collaborate spatially? And where separately?

The objective is to formulate a well-defined vision of spatial collaboration. This could apply to an educational organisation composed of various components (teams) or multiple organisations seeking to collaborate under one roof. This workshop fosters collaborative exploration of practical opportunities. The outcome is valuable for shaping an accommodation concept. Collaboration relies on trust, and this workshop fosters a deep sense of understanding for one another.



PREPARATION AND INSPIRATION

Ensure you have ample space available. Create three concentric circles on the floor using tape or string, or utilise a specialised rug designed for this purpose.
 Inner circle: Collaborative space.
 Outer circle: Individual or separate space.
 Middle circle: Intermediate or shared space.

Pre-segment the different groups within the outer ring ('separate'). Prepare the activity cards or provide an ample supply of Post-its for participants to write their own activities. Supply pens and A3-sized coloured sheets of paper. For inspiration, illustrate commonly used collaboration principles. Summarize them on a single A4 sheet and distribute these to the groups.

DO'S AND DON'TS

Moving around a large circle enhances cooperation and energizes the participants.

Try and keep it from becoming a formal meeting. Shift from 'Having' to 'Being.' It's crucial to emphasise that we are discussing activities—'what actions would you like to take in that place'—rather than just 'what physical space do you want to possess.' In cases involving multiple organisations, each organisation can initially outline its core activities. Conclude the workshop by summarizing the key points on a flipchart.

ALTERNATIVES

An alternative to the rug is a smaller size as a tablecloth.



INTRO

10 M Explanation by the facilitator.
20 M Small groups (2-3 people) describe all activities using 'Activity Cards' or Post-its.
20 M Place the cards in the three rings.

BODY

30 M Each group gives a brief explanation around the circle. Explore collaborative opportunities. Cards are slid to the centre (closer together) or outwards (farther apart).

FINAL

10 M The facilitator groups the activities on coloured paper.
10 M Make a summary sketch on the flipchart.

WORKSHOP CARD

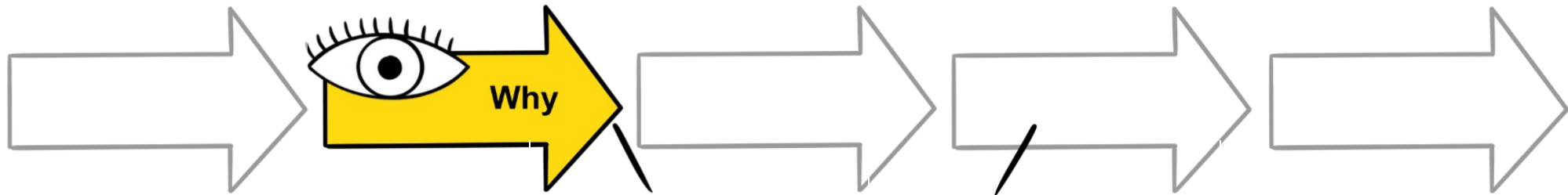


12-36 persons



100 Minutes





NEIGHBOURHOOD IN FOCUS



CENTRAL QUESTION, GOAL AND RESULTS

"What can we do for the neighbourhood?"

Education holds significant social value, and schools are increasingly seeking ways to establish deeper connections with their neighbourhood. Being of value to local residents can provide enriching learning experiences for students/pupils. This initial brainstorming session encourages participants to think broadly.

PREPARATION AND INSPIRATION

Supply glue, tape and markers. Arrange tables in a row, creating an extended surface covered with paper. Draw a central line down the length of the paper and divide it into age groups ranging from 0 to 100.

Gather a diverse collection of magazines and invite participants to create collages on the table, accompanied by their written ideas. Ensure a wide range of options, including lifestyle, gardening, hobbies, current affairs, sports and more.

DO'S AND DON'TS

Extend invitations to local residents or representatives of the neighbourhood association, for instance, and create a festive atmosphere with snacks, drinks and music. Even small-scale projects can make a positive impact and be valued. Additionally, consider organising events like pot-luck suppers or talent shows. Encourage participants to brainstorm creative and ambitious ideas. Clarify beforehand what can and cannot be expected.

ALTERNATIVES

If the initial meeting proves successful, there's a strong likelihood that neighbourhood associations will want to replicate it on a larger scale. This workshop is also adaptable for a sizable number of participants.



INTRO

15 M Welcome and introduction round.
5 M Explanation of the workshop.

BODY

45 M Creating a collage.
15 M Each participant is provided with 10 green stickers to endorse ideas.

FINAL

30 M Participants comment.
10 M Acknowledgements.

WORKSHOP CARD

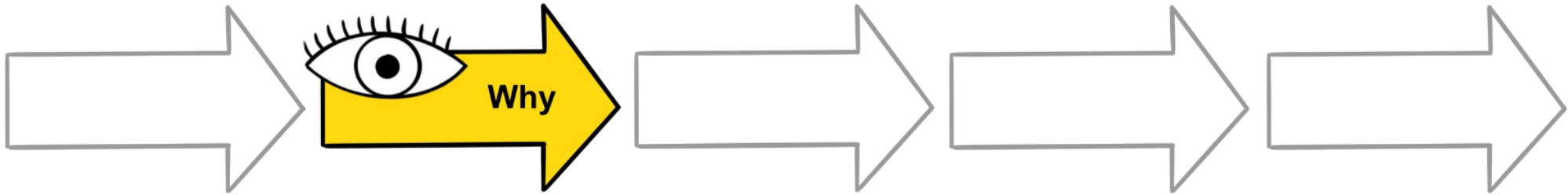


12-36 persons



120 Minutes





PRISMA-TABLE

CENTRAL QUESTION, GOAL AND RESULTS

"How can individuals with diverse perspectives collaborate towards a common goal?"

The workshop begins with a central question and encourages participants to simultaneously share their thoughts and images on the table, associating them with six different perspectives (represented by colours).

PREPARATION AND INSPIRATION

Set up a long table, cover it with paper, and position the six coloured perspectives on top. Provide a brief explanation of these perspectives in advance. Provide participants with markers, post-its and green stickers, and place a collection of inspirational pictures on a separate table.

DO'S AND DON'TS

Frame a clear and specific question, such as "What criteria should our ideal learning environment meet?"

Values
Traditions
Safe



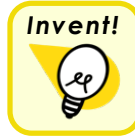
Clear
Reliable
Structure



Inclusive
Together
Relationship



Freedom
Synergy
Open mind



Success
Opportunities
Competition



Courage
Decisiveness
Autonomy



Invite participants to write down their thoughts and ideas representing the six perspectives directly on the paper-covered table. Encourage participants to engage with and respond to each other's ideas, collectively creating a comprehensive mind map.

Ask to include a photo as an illustration for each idea. Distribute green stickers as 'likes' for statements on the mind map. Discuss the ideas that receive the most likes. Subsequently, follow up the workshop with a practical workshop (such as Model Development) to concretise the starting points.

ALTERNATIVES

A detailed description with various options is accessible. For instance, you can precede this workshop with the 'Excellent School' workshop or the Index of Learning Spaces.



INTRO

15 M Welcome and introduction round.
5 M Explanation of the method.

BODY

45 M Create a large mind map.
15 M Everyone gets 8 green appreciation stickers to the attach to the texts and images.

FINAL

30 M Participants explain their ideas.
10 M Acknowledgements.

WORKSHOP CARD

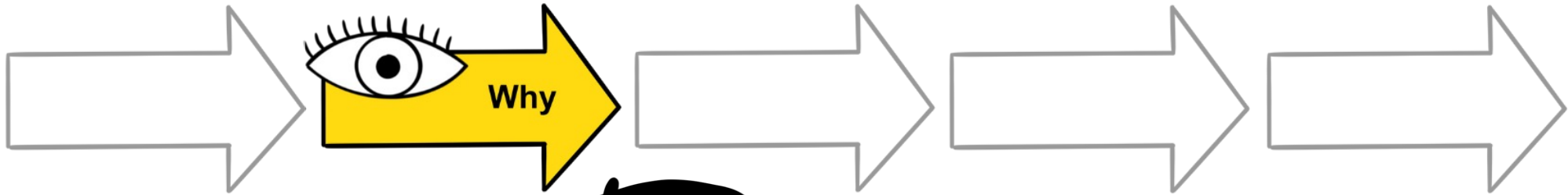


12-36 persons

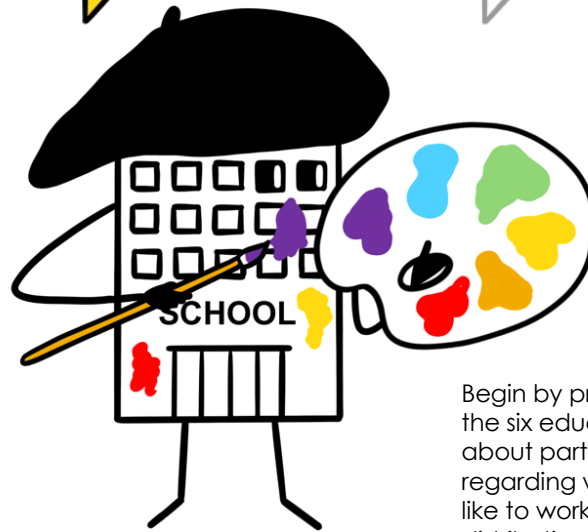


120 Minutes





THE EXCELLENT SCHOOL



CENTRAL QUESTION, GOAL AND RESULTS
"What are the fundamental principles for creating an exceptional school?"

Professor Olaf Köller has dedicated extensive research to identifying the characteristics that define an exceptional school. He has identified six key themes, which we have associated with the PrismaTisch colours. By incorporating this workshop as the initial phase of PrismaTisch, we can delve deeper into educational principles. The six themes are: pedagogical climate (purple); educational quality (blue); addressing diversity (green); learning organisation (yellow); performance (orange); and responsibility (red). The survey provides general statements, but what holds significance for your school?

PREPARATION AND INSPIRATION

Ensure an ample supply of post-its and pens. For inspiration, print out the principles from Professor Köller's research and distribute them midway through the workshop.

DO'S UND DONT'S

Participants have already received an explanation of the six colours as part of the PrismaTisch method.

Begin by providing an explanation of the six educational topics. Inquire about participants' preferences regarding which theme they would like to work on, ensuring an even distribution across the six topics. Subsequently, each group formulates three initial focal points and records them on separate post-its. Distribute Professor Köller's findings only after the groups have had the opportunity to reflect on their own ideas. This allows participants to critically evaluate the findings and, if necessary, enhance their own conclusions. Each group then defines three key starting points and attaches them as Post-its corresponding to the PrismaTisch colour.

Afterwards, the group provides a concise explanation. In the subsequent PrismaTisch round anyone can contribute to the text or provide comments. Please note: This discussion pertains to teaching, not architecture/construction.

ALTERNATIVES

If a school has recently established its teaching principles, inquire about which of these principles influence the learning environment. Try to identify at least one principle per colour theme. It may become apparent that a certain colour has received too little attention.



INTRO

10 M Explanation of purpose and themes.
5 M Classify into 6 theme/colour groups.

BODY

20 M Each group names 3 principles.
10 M Improve outcomes based on the provided examples.

FINAL

15 M Short presentation.

WORKSHOP CARD

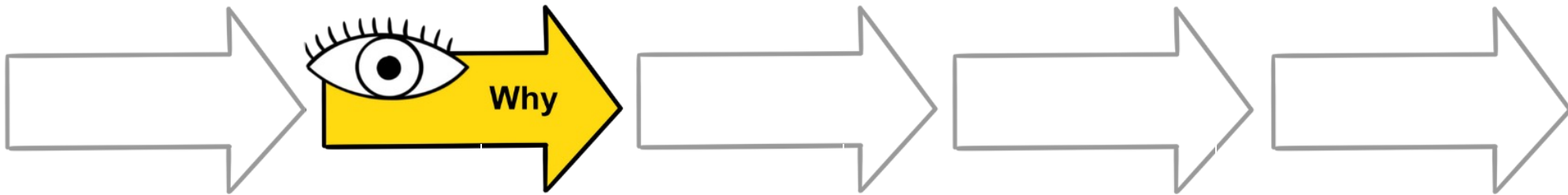


12-36 persons



60 Minutes





TIME TRAVEL

CENTRAL QUESTION, GOAL AND RESULTS

"What do we aspire to accomplish in the future?"

Participants adopt the perspective of fictional characters, providing them with a broader outlook on the future. This approach encourages everyone to contemplate their deepest desires without being constrained by current circumstances or perspectives.

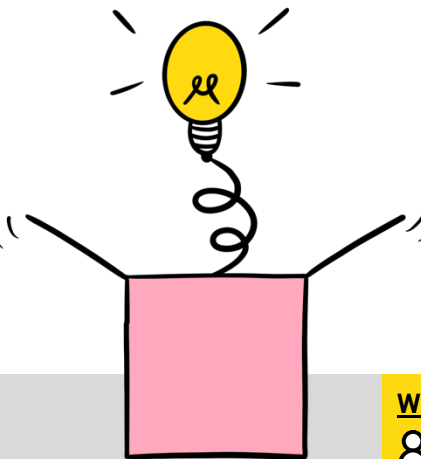
The objective is to stimulate forward-thinking and unconventional ideas.

PREPARATION AND INSPIRATION

Arrange the room with tables and chairs set up in pairs, for interviews. Provide each pair with 2 writing pads and pens.



Develop concise profiles (maximum 125 words) for fictional characters, including students, teachers, and managers. Describe their accomplishments in 2035 within the school and the roles they played.



DO'S AND DON'TS

It is the year 2035. Your task, as journalists, is to uncover the secret behind the school's success, five years after the grand opening of the new building. What role does the school play in the personal development of its students? And has the new building contributed to this in any way?

Both members of the duo should start by preparing for the interview, formulating questions based on the provided profiles.



The workshop is most effective with a small group of around 12 participants. Encourage client involvement in the profiling process. Challenge participants to explore the extremes and push their boundaries.

ALTERNATIVES

Allow participants to create their own profiles and then exchange them with one another.

INTRO

10 M Explanation and division into pairs.

BODY

20 M Preparing for interviews.

20 M First interview.

20 M Turn the tables, second interview.

FINAL

30 M Report of interviews.

WORKSHOP CARD

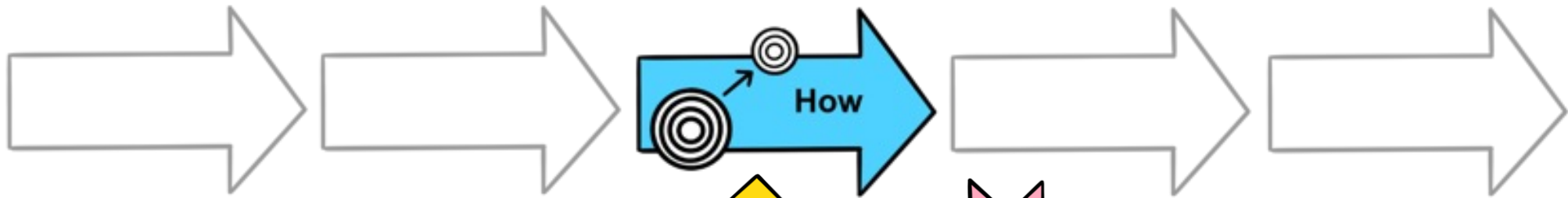


12 Persons



100 Minutes



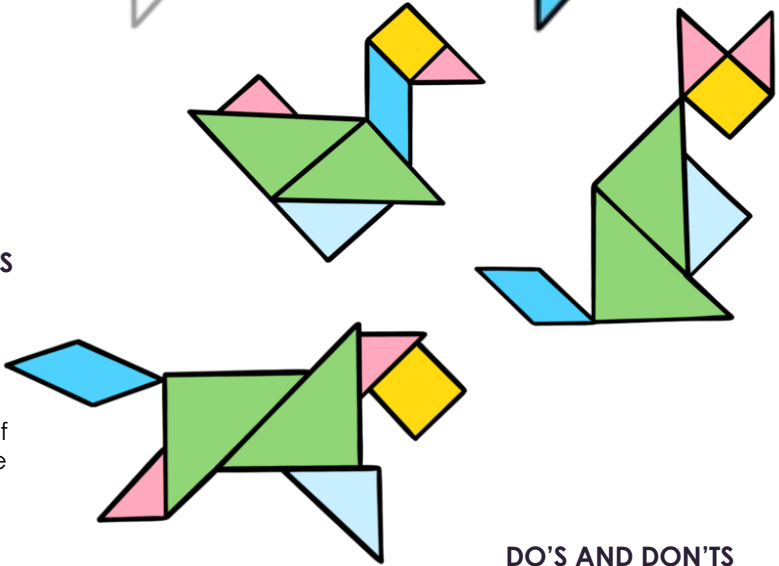


MODEL DEVELOPMENT

CENTRAL QUESTION, GOAL AND RESULTS

How would you like the building to facilitate collaboration and interaction?

In a well-designed school building, much of what unfolds around you contributes to the learning experience. A building imparts various impressions, sets an atmosphere, and offers a balance between tranquility and vibrancy. It also influences who you most frequently encounter and how informed you are about others' activities. Effective teamwork benefits from spontaneous encounters and reduced dependence on formal meetings. A building can either support the desired social organisation structure and enhance communication, or hinder it. In this workshop, participants will create a model that aligns with the intended interactions among all users and teams within the school.



Tangram: using the same building blocks to create entirely different models.

PREPARATION AND INSPIRATION

Prepare sets of coloured circles in various sizes for each group. Supply felt-tip pens, flip-chart sheets, Post-its and glue. Arrange tables suitable for 4-6 people to work together.

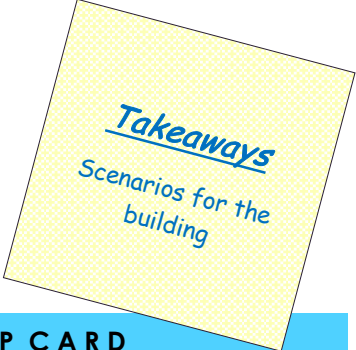
DO'S AND DON'TS

Present examples of how a building can impact communication positively and negatively. The 'Sell & Explore' working format, as described on the next page, is highly effective for sharing knowledge between groups, fostering improvements, and often aligning plans more closely. Form diverse groups. Encourage participants to articulate WHY and HOW their model aligns with the school's vision.

The objective is to accumulate as much content as possible; the aim at this stage is not to reach a consensus on a single scenario. Summarise the commonalities and differences among the models and announce that the next step is to develop the most comprehensive synthesis of all the ideas.

ALTERNATIVES

If the space programme is already defined, the number of circles can roughly correspond to it. Drawing is also permissible. Invite groups to elucidate their model through a film presentation, fostering enthusiasm and liveliness. This often yields more captivating insights than traditional plenary presentations.



10 M Brief explanation of purpose and division into groups (4-6 people).

30 M Each group creates a model and describes the benefits.
30 M Selling and exploring.

30 M Making a film or presentation.
10 M Summarise and indicate follow-up.

WORKSHOP CARD

9-36 persons

110 Minutes



SELL AND EXPLORE

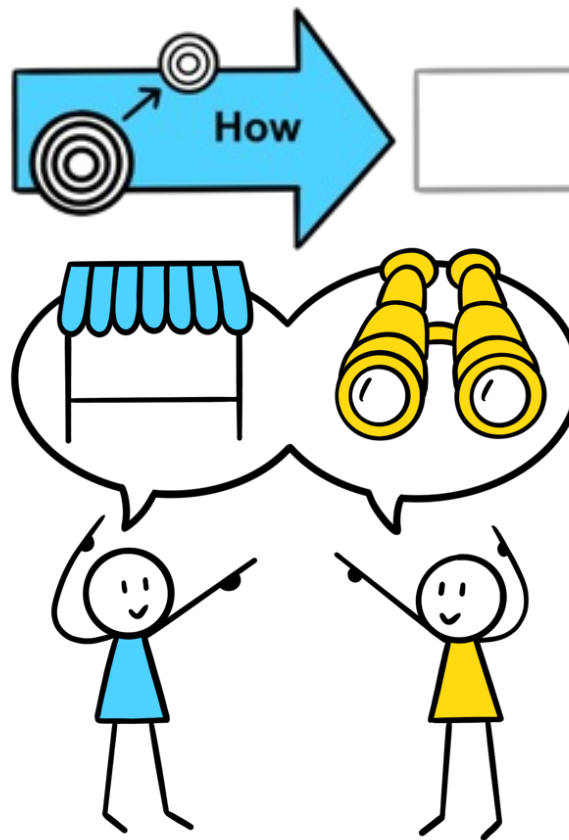
CENTRAL QUESTION, GOAL AND RESULTS

"How can groups efficiently share information amongst themselves?"

Working together on a model goes well in groups of 3-6 people (see 'Model development'). 'Sell and Explore' is an effective way to exchange knowledge between groups, while keeping the energy present. Due to the intensive exchange, plans often move towards each other.

PREPARATION AND INSPIRATION

Establish the central question that all groups will address. Arrange tables suitable for 3-6 people and create a rotation schedule, distributing it to all participants. Collaborative model development is best conducted in groups consisting of 3-6 individuals (refer to 'Model development').



'Sell and Explore' is an effective method for intergroup knowledge exchange, maintaining an energetic atmosphere. This dynamic exchange often results in plans converging. The system is exactly correct if the number of people consists of 9 (3x3); 16 (4x4); 25 (5x5); 36 (6x6) people.

Deviating is not a disaster. Steer strongly on time, for example by projecting a backward clock.

DO'S AND DON'TS

When modelling, ask to name the Unique Selling Points.

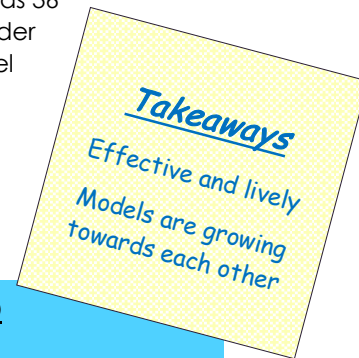
Ensure diverse group compositions by, for instance, inquiring, "Who have you not yet had the chance to get to know better?"

ALTERNATIVES

For both round 1 and round 2, create and distribute group assignments.

Encourage groups to elucidate their final results through recorded video presentations. This aids in reflection and often yields more comprehensive insights than traditional plenary presentations. Subsequent discussions of the results can be held during the next meeting.

If the group exceeds 36 participants, consider conducting parallel sessions.



INTRO

10 M Explanation and group assignment.
40 M Round 1: Each group makes a model. (see model development).
5 M Each group appoints a vendor. The others are scouts and spread out among the other groups.

BODY

10 M Round 2: The seller sells the plan to the scouts. Scouts listen, discussion not necessary.
10 M Each scout gives feed back to seller. The seller listens, discussion not necessary.

FINAL

5 M All scouts return to their own group.
10 M Round 3: Processing feed-back and new ideas.
30 M Discuss all results in plenary. **10 M** Summarising the results.

WORKSHOP CARD



9-36 persons



130 Minutes



EXPERIENCE THE PLAN

CENTRAL QUESTION, GOAL AND RESULTS

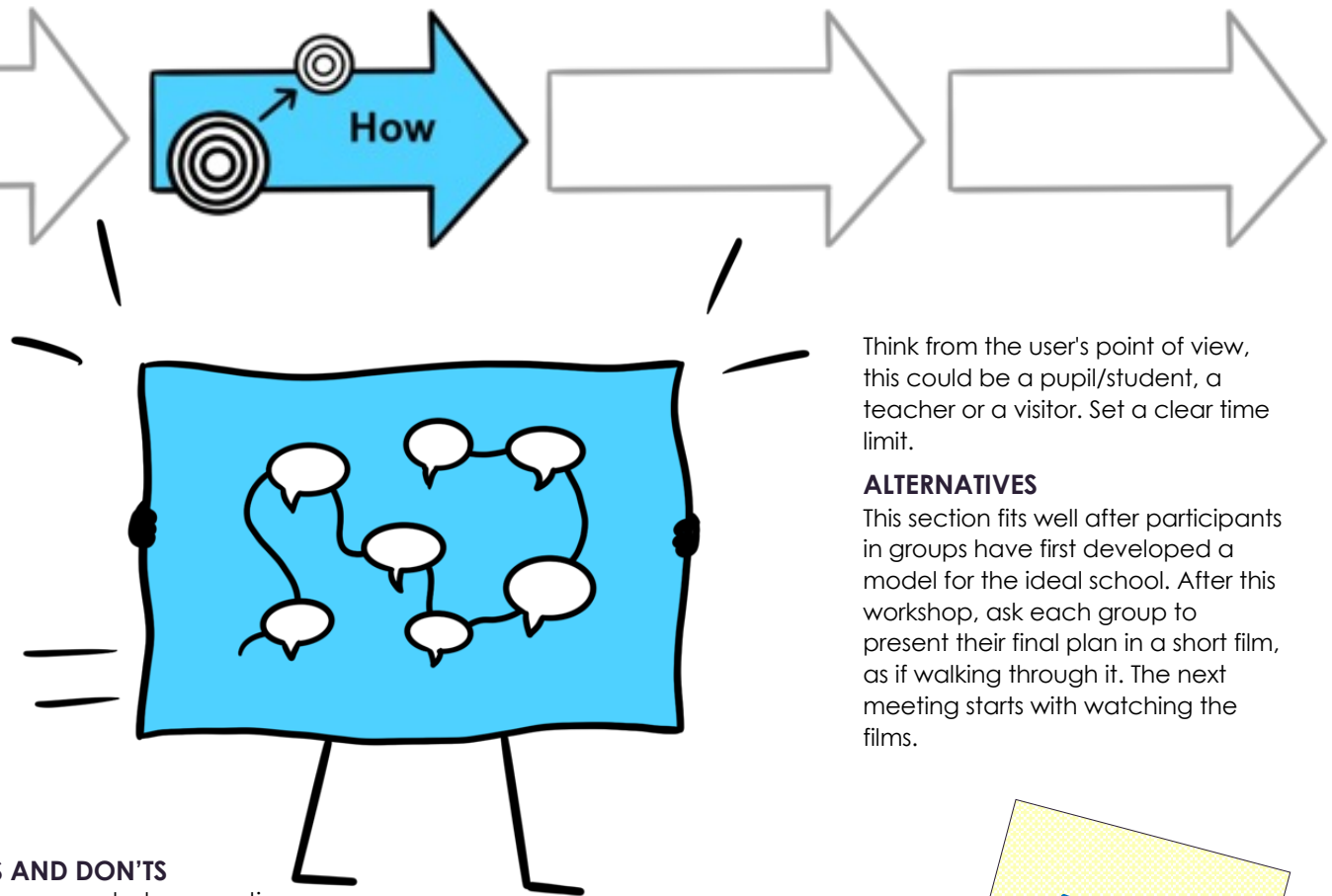
"How will you envision your experience in the building later?"

Participants embark on a hypothetical journey through their own newly devised models, immersing themselves in the impressions it creates. They are provided with a walking map that guides them through seven imaginative questions. Ultimately, they formulate a motto or nickname for their plan.

This approach places emphasis on emotions and perception, aiding in the development of a comprehensive and cohesive narrative.

PREPARATION AND INSPIRATION

Prepare Post-its and markers. Create walking maps (A3 size) and consider the questions you wish to include on the map.



DO'S AND DON'TS

Pose open-ended, perception-centred questions that are tailored to the subject matter and the intended audience. Some sample questions to consider include: What emotions do you experience when you step into the building? How does it inspire you? Describe the prevailing atmosphere.

What indicators lead you to recognise education geared towards development? What type of collaboration do you encounter? What standards are evident? What feeling does the school evoke? What nickname would you like the school to have?

Think from the user's point of view, this could be a pupil/student, a teacher or a visitor. Set a clear time limit.

ALTERNATIVES

This section fits well after participants in groups have first developed a model for the ideal school. After this workshop, ask each group to present their final plan in a short film, as if walking through it. The next meeting starts with watching the films.



INTRO

5 M Brief explanation of purpose. Group assignment - or same at Model making.

BODY

30 M Participants get to work on their walking map. For each question, they write their answer on a Post-it.

FINAL

15 M Hang the results side by side. Stand by and ask for an explanation for each group.
10 M Feedback. If necessary, collect the answers for each question.

WORKSHOP CARD

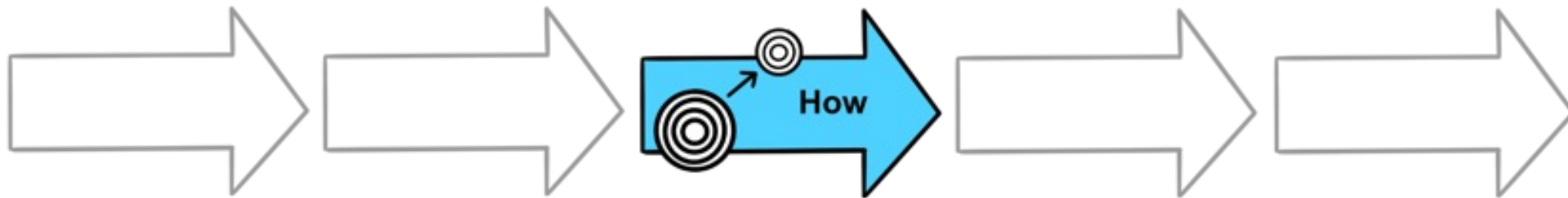


12=36 Persons



60 Minutes





THE FOURTH TABLE

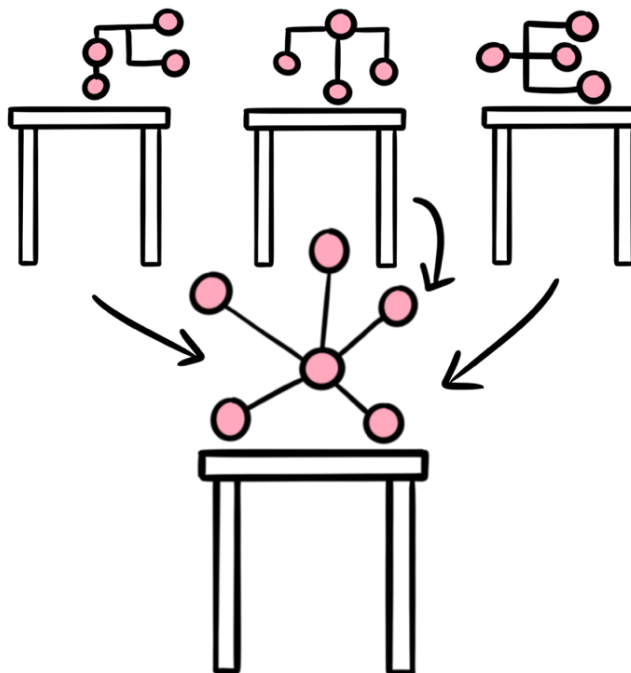
CENTRAL QUESTION, GOAL AND RESULTS

"How do you achieve a cohesive synthesis from diverse ideas (models)?"

In the creative process, it's often beneficial to explore various models before making a selection. This approach emphasises content and facilitates discussions about the proposals.

PREPARATION AND INSPIRATION

Restrict the number of distinct models to a maximum of three, ensuring they are fundamentally different. Arrange four tables in the room: three for the scenarios and an additional table for the synthesis. Place each of the three models on a separate table.



DO'S AND DON'TS

Beforehand, determine the principles that the scenario should adhere to, and write them on Post-its.

This approach is suitable when models or scenarios have already been formulated. Organise three groups, preferably with a mix of participants.

Each group begins at a table, deliberates the advantages and disadvantages of the models, and records them on green (advantage) or red (disadvantage) Post-it notes. The groups relocate to the next table and continue the comments left by the preceding group. Avoid hasty decisions regarding any of the three models; instead, utilise the fourth table to integrate the various models.

ALTERNATIVES

Display all the models on the wall and conduct a 'flap market' where participants individually attach pros and cons to the models.



INTRO

10 M Explanation of purpose, clear description of models and division into groups (4-6 people).
20 M Round-1. Each group takes a seat at a table and describes the pros and cons on green and red Post-its.

BODY

10 M Round-2. Move on to the next table to complete the previous group's work.
10 M Round-3. Similar to Round-2, but less and less time is needed.

FINAL

30 M Discuss and arrive at a synthesis on the fourth table.
10 M Summarise and indicate follow-up.

WORKSHOP CARD

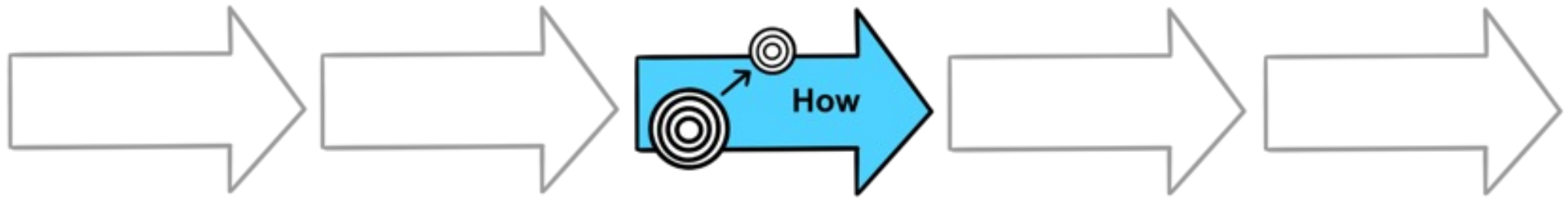


12-36 persons



90 Minutes





WHAT DO YOU DO IN 24 HOURS?

CENTRAL QUESTION, GOAL AND RESULTS

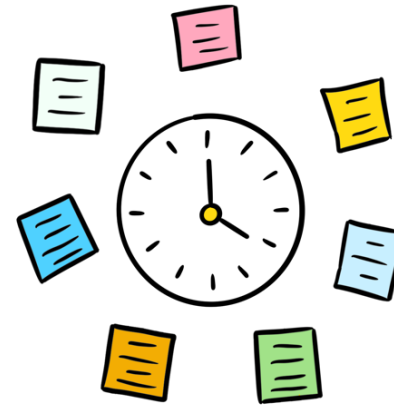
"What is everyone engaged in?"

Learning occurs throughout the day, at various times and in diverse locations. This includes activities on the school premises and increasingly in hybrid learning settings extending beyond the school's boundaries. Participants outline the activities of both students and teachers throughout a 24-hour period. The results offer valuable insight into where specific activities occur and serve as input for calculating the required spaces. This approach encourages thinking beyond the confines of a traditional curriculum while also aiding in the realization of visions.



PREPARATION AND INSPIRATION

Create a worksheet for participants to use when characterising their persona, focusing on a specific student or teacher. Make large sheets, approximately the size of 2 flipcharts, featuring a central clock. Supply participants with Post-its and pens for this exercise. To spark inspiration, distribute a sheet listing various potential activities encompassing a broad spectrum of learning opportunities. Ensure that logistical processes are also included.



DO'S AND DON'TS

When instructing, give clear examples describing activities in detail. Enhance participants' understanding by presenting various types of learning processes in a visual presentation, which can be shared with the groups.

ALTERNATIVES

Consider utilising 'personas,' which represent specific user groups (e.g., young-old, fast-slow, etc.). Assign different groups to work on distinct personas. In each group, designate one persona as a student and the other as a teacher. Allow participants to choose which personas they'd like to work on. On the clockwise sheet of paper, create an outer ring for the student and an inner ring for the teacher.



INTRO

5 M Brief explanation of purpose and division into groups (4 people).

BODY

15 M Each group describes personas (student and teacher) on 2 sheets of paper (A4).

50 M Describe activities around the clock (two circles: student and teacher).

FINAL

20 M Presentation by group.

The results can serve as input for analysing space requirements.

WORKSHOP CARD



12-36 persons



90 Minutes



THE FOUR SEASONS



CENTRAL QUESTION, GOAL AND RESULTS

"All ideas are welcome, but what is the current status of this idea?"

In a learning organisation, new ideas continuously emerge. The objective of this approach is to collectively assess which phase (spring, summer, autumn, winter) an idea is currently in and to identify the requirements for its progression. By using seasons as a metaphor to associate ideas, it becomes possible to respectfully distinguish between concrete plans and early-stage concepts, acknowledging the value of both. This allows for the continual influx of new plans and the advancement of existing ones to the next phase.

PREPARATION AND INSPIRATION

Place a large circle on a table (or hang on the wall) and divide it into four equal segments for the seasons.

DO'S AND DON'TS

Explain that the journey from an idea to implementation can be likened to the changing seasons. Encourage participants to reflect on this analogy and attach their plans or ideas to a specific season. Emphasise that no ideas should be dismissed prematurely.

Spring: This is the phase of a budding idea, where a seed is just beginning to sprout. It's a time for careful nurturing, protection, watering and fertilization.

Summer: During this phase, the idea experiences growth and blossoming, and bears fruit. It's essential to delve deeper into exploring and developing the idea further.

Autumn: This is the harvest season, where leaves fall, and it's time for a thorough analysis and evaluation of the results. What will endure from this phase? What will remain?


Winter: This season represents a time of tranquility, akin to snowfall. Rather than immediately dismissing an idea, it's essential to create mental space and peace, allowing room for new ideas to emerge.

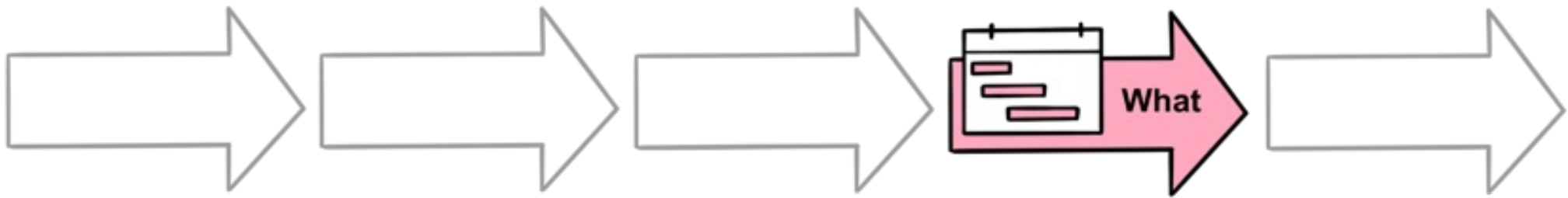
Assign plan owners (duos) and request that everyone develop their plan using the same format, making discussions more straightforward.

ALTERNATIVES

A variation is to make 4 seasonal tables. Participants first enhance these tables with objects or words. Then everyone stands at the table that best suits them. If everyone stands at the 'Spring' table, much can be gained by paying more attention to 'Autumn' (evaluating, securing results, archiving).

Takeaways
Room for ideas:
ALWAYS!

INTRO	BODY	FINAL	WORKSHOP CARD
<p>10 M Explaining the purpose and functioning of the seasons.</p>	<p>25 M Discuss in small groups (2-3 people) what your plans are and write on Post-its.</p> <p>5 M Everyone sticks the Post-its on the seasons circle.</p>	<p>40 M Participants present their ideas, jointly discuss in which season it fits best.</p> <p>10 M Discuss who the plan owners are and give a clear format to work it out.</p>	<p>6-24 Persons</p> <p>90 Minutes</p> 



NOW, HOW, WOW - POW!

CENTRAL QUESTION, GOAL AND RESULTS

"Which ideas are feasible now and which are interesting for the future?"

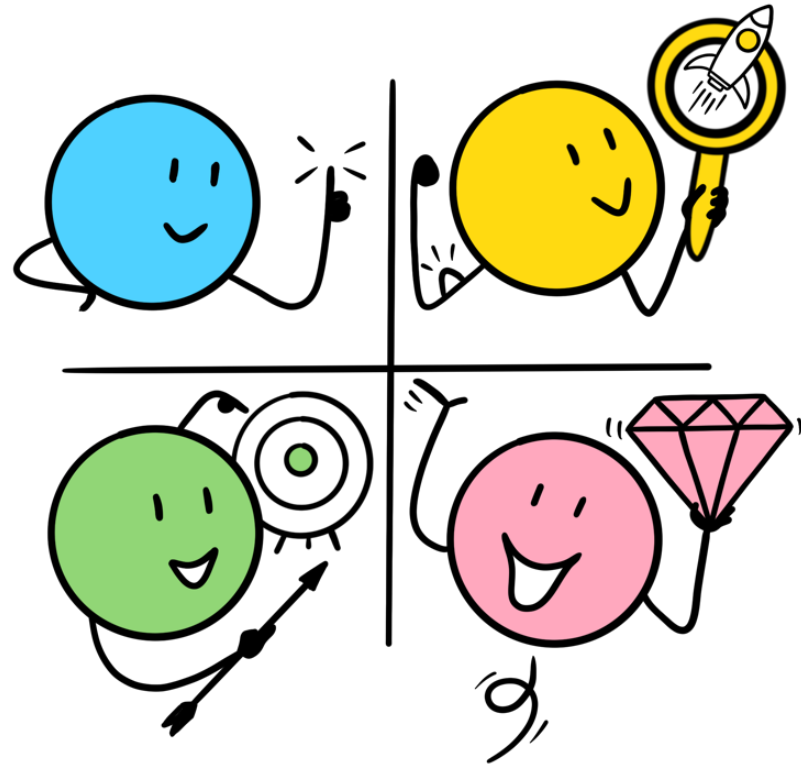
The aim is to collect different ideas and then categorise them.

PREPARATION AND INSPIRATION

Prepare four different colours of Post-its. Create a section (four boxes) with the following text:

Now (Blue). These ideas are easily achievable now; they involve minimal risk; they are accepted within the organisation; similar initiatives have been attempted before, and there are existing examples.

How (Yellow). These ideas are highly intriguing for the future; they captivate my interest; we should delve deeper into them.



Wow (Red). These ideas strike me as highly innovative; they energize me; can we bring them to life?; what a groundbreaking concept!

Pow! (Green) Create a fourth quadrant where conclusions can be placed.

DO'S AND DON'TS

Encourage generating a multitude of ideas. Every idea has value and is worth exploring. This format is ideal for a rapid brainstorming session. Establish workshop rules: avoid initial discussions; those can be addressed later.

ALTERNATIVES

This method is suitable for a rapid assessment or inventory. 'The Four Seasons' is designed for an ongoing process, continuously accommodating new ideas.



INTRO

5 M Presentation, purpose, approach and workshop rules

15 M Small groups (2-3) gather ideas, at least 3 times now, how and pow.

BODY

5 M Stick Post-its in the quadrants.

10 M Each sticks 3 green stickers to the best and 3 red to the most questionable ideas.

FINAL

15 M Pop! Discuss and record conclusions in the fourth 'Pow' quadrant.

WORKSHOP CARD



12-24 Persons



50 Minutes





STRESS TEST

CENTRAL QUESTION, GOAL AND RESULTS

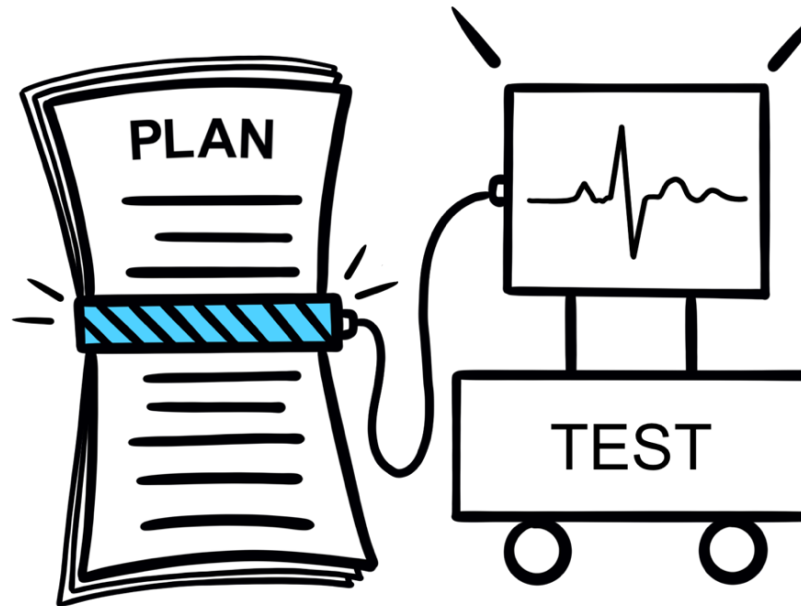
"What are the risks of this solution?"

A new idea or plan is often accompanied by great optimism and enthusiasm. But is the plan feasible? And what are the risks? Put the plans to the test with an upbeat stress test. This leads to improvements and confidence among participants in the process. In addition, it gives insight into where follow-up research is needed.

PREPARATION AND INSPIRATION

Place a large sheet of paper on a table, with a good weather sign (sunshine) above and a bad weather sign (storm and lightning) below. Write "unlikely" on the left and "likely" on the right.

This creates 2 dimensions and 4 imaginary boxes.



Risk definition:
 High impact x high probability = high risk.
 Low impact x low probability = small risk.

DO'S AND DON'T'S

Encourage participants to think of extreme scenarios, positive and negative. Write down everything that comes to mind.

Think about the near and distant future, macro and micro. Don't rule anything out in advance. This form of work can be a good conclusion to a meeting.

ALTERNATIVES

The stress test lends itself well to early ideas. Once plans are further developed, it is advisable to carry out a comprehensive risk analysis.



INTRO

5 M Brief explanation of intent.
10 M Participants describe in groups (2-3 p) on Post-its which developments they are considering and how they might affect the plan.

BODY

5 M Everyone sticks the Post-its on the paper and determines the distance to sunshine / severe weather; and also to likely / unlikely. The facilitator organizes the Post-its into groups.

FINAL

5 M Each person gets 3 green and 3 red stickers and indicates what they feel is important (green) or unimportant (red).
20 M Discuss results and decide where the Post-it belongs.
5 M Conclusions, follow-up research.

WORKSHOP CARD

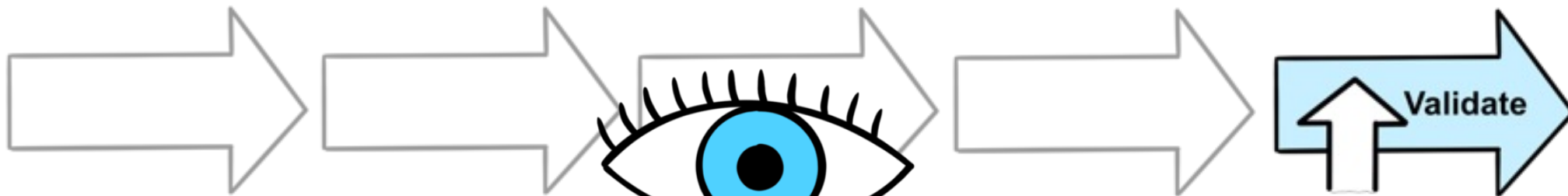


12-36 persons



50 Minutes





OBSERVATION GUIDE

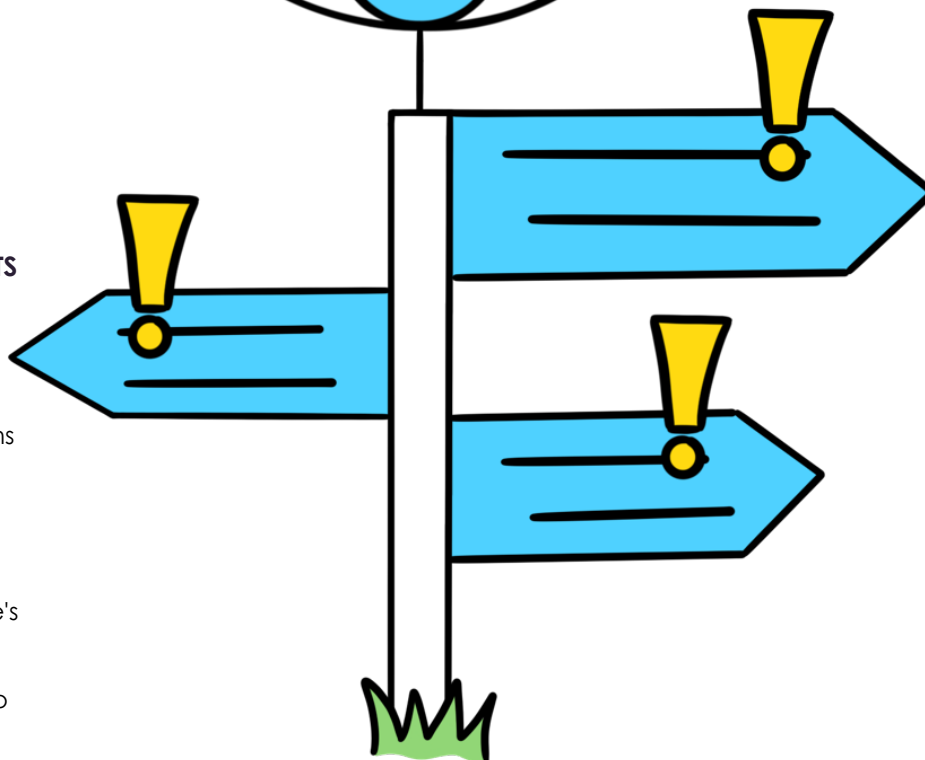
CENTRAL QUESTION, GOAL AND RESULTS

"What should you look out for on a study tour?"

A study tour is a valuable moment in the process. Participants gain many impressions and share them with each other. The purpose of the study trip is to test the insights already developed against the experiences of others and, of course, to gain new ideas. An observation guide, in which the most important principles of one's own plans are listed separately, provides additional focus. The participants write in their guide for each principle what they do or do not want to incorporate from the examples they visit. The guides are collected at the end of the trip, after which the notes are processed.

PREPARATION AND INSPIRATION

Make a booklet with information about the schools to be visited plus principles of your own project. Ask if teachers or students from the school to be visited would like to tell anything to the workshop group.



DO'S UND DONT'S

Before organizing the study trip, take time to reflect on your own principles and preferences. This will prevent merely 'shopping' for great ideas from others without a clear understanding of how these solutions align with your own development process. Choose the travel goals to match the school's questions.

If necessary, invite stakeholders (such as administrators) from outside the school to participate. A study tour is often a common point of reference in the follow-up process. Students/pupils have a refreshing outlook. A tour by students from the school to be visited often yields an interesting (and honest) story.

Create a collaborative app group to communicate changes. A 2-day trip ensures team building and has the advantage that everything can be discussed in detail in the evening. During the bustrip explain the observation guide. Ask a particular participant to sit at the front of the bus (microphone) and ask challenging, provocative questions. This person can then invite another to interview. Suggest a prize for the most daring and funniest question.

ALTERNATIVES

Put together 'scout duos' of people with different interests, who visit different projects. They can then share their experiences in the project group. Here, too, the observation guide is a useful tool.

During the viewing, participants may walk through the building on their own. The observation guide may include a route plus viewing tips.



COLOFON

Teun van Wijk from the Dutch school building consultancy firm ICSadviseurs was responsible for the development of the LEA handbook: "We Build a School! The Art of Participation in School Construction." The handbook is one of the four project outcomes of the Erasmus+ project 2020-1-DE02-KA202-007655 LEA (Learning Environment Applications).

The project outcomes of LEA have been published on the following platforms/websites in three languages (German, Dutch, and English) and can be freely downloaded as open educational resources:

www.learning-space.eu
www.sophia-akademie.de
www.projektlernraum.de
[Projects | Erasmus+ \(europa.eu\)](http://Projects | Erasmus+ (europa.eu))

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