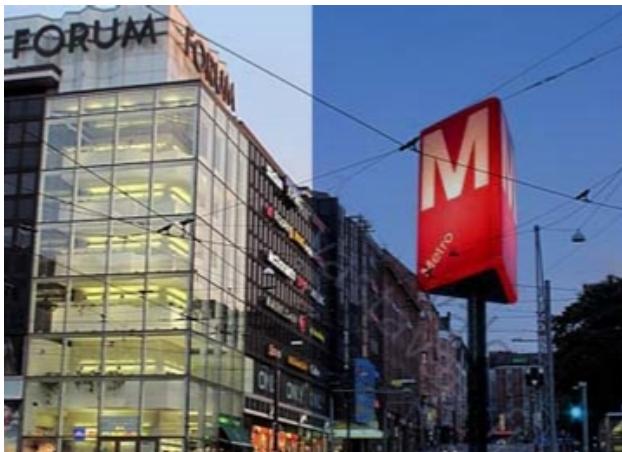


Campus Group 3 - Reflecting:

Libraries and the *Learning Centre*



The Story

It was a rainy Tuesday, Tiina, the student in design was heading towards the School of Engineering. She was going to attend a lecture on city planning. She left the bus and hurried towards the building. I am early, for change, she said to herself. Well, it is my first time here so it was difficult to know the exact time for the voyage. I'll just pop into the Learning center to check my mails, read once more through my assignment and get a cup of tea - with this weather I really need it. She entered the building leaving the dark morning rain outside. She looked around and saw the familiar colors pointing the way to learning center. Within a moment she relaxed inside the center having a cup of tea in hand warped up in the warmth of the sofa. I should have put more clothes on, the fall is coming too soon this year, she reflected while plugging in her computer.

Even though it was early in the morning the learning center was slowly filling up with people, there was already a group doing a small model of town and some elder students reading and writing, alone but together. This feels just like home she felt, in our school's learning center they might be doing models of chairs and the journals on tables are different, but still the same atmosphere of activity and welcome, people studying and working together. Meetings going on behind the class doors... Oh well they did have a bit different pastry, which is delicious, she thought, while eating her cupcake.

Suddenly she woke up from her thoughts as the furniture nearby were moved into a small circle. What's going on she asked from the red haired man? Do you study here? No, he answered, I study at the Physics, but I always come here Tuesday mornings to meet our discussion group on environmental issues. We have adopted this learning center as our morning discussions place this semester, we change centers each semester, he explained. Tiina got excited: Really, may I join? I have recently got interested in environmental questions in design in urban context. Of course, it is informal group and anybody may join and attend whenever they wish, said the red haired young man, looking happily to a small

group of comfortable chairs creating an intimate space separated from the rest of the room by small plants.

At the same time, Pekka Ph.D. from Economics felt nervous inside the main hub leaning center. He looked around the new building, grand and familiar at the same time. The international conference was about to begin, and it was his first time to be responsible for the academic content. I hope all will go well! Actually, it was easy to organize the event, even though it was bigger in scale, the same learning center concept made it easy to think places for seminar groups, posters and in between meetings and breaks – it's just the same as organizing seminars in our own school's learning center, he felt. He was looking at the people coming and going from metro, hurrying to classes, or visiting the main library or grabbing a coffee, and felt at home.

Slowly the conference participant started to come. They entered the reception hall from metro reading the Aalto leaflets and maps given to them in the Aalto wagon. Lisa, professor from USA, came and hugged Pekka. Oh what a wonderful way to welcome us, the cocktails in Helsinki in your beautiful downtown Learning center were excellent. And it was so interesting to see the exhibition. I just loved the small cups in squares, and the funny posters on chemical formulas, even though I could not understand a word on them. And thank you once again to organize the space for us to have our meeting yesterday in your Economics' learning center. I really admire the concept, even for us visiting here for few days, it gives easy access to meet and work while attending the conference, Lisa exclaimed in her bubbly way.

The rain poured down and the activities continued, the conference started and the scholars entered the main room to hear the opening words. Tiina got up to start her class and the red haired man debated fiercely with his friends. And the learning centers all around Aalto schools and buildings puzzled with people, working, debating, reading, writing, relaxing...

1. Learning Center

We propose a learning center concept that could be applied starting with small steps to each Aalto school and building. The concept should be flexible allowing participatory design, adaptations and changed easily. It should be created with student centric processes in continuous development. It needs to be recognizable to all Aalto people.

Thus, we suggest a learning center concept that would consist of similar recognizable learning centers in each building. And, a central learning center hub, where the activities hosted by the learning centers could be offered in a larger scale. And, a downtown learning center with the similar learning center concept but with emphasis on opening up towards society, towards people passing by and Aalto visitor's, offering more spaces and activities around exhibitions, reception rooms, cafes in downtown Helsinki. We also propose a presence in metro, which would connect the learning centers, in a form of Aalto wagon or carriage present in metro, offering information on Aalto.

The key idea is to offer a space in each Aalto building that allows us to feel at home and know how to function, a space to in each Aalto premises:

- * To be silent and focus
- * To interact with artifacts (books, art, virtual)
- * To interact with people
- * To work with others
- * To have fun with others
- * To discuss
- * To rest a while

2. Trends in this area in HE that Aalto needs to consider

Universities role in the society is changing. Enterprises, communities, alumni, and current and future students are looking for stronger interaction with Aalto University. Learning centers can enhance this interaction, as they provide natural setting for collaboration and discovery.

Companies are currently changing the way they create new innovations. Traditionally, big enterprises have had internal research laboratories. These have effectively developed new innovations. However, the commercialization has been rather slow and expensive. Also, there are many innovations that the companies themselves have not been able to utilize. Thus, companies have been turning to more open innovation processes. Because of this, many enterprises have closed their research centers and are actively searching collaboration with other companies, small start-ups, and - especially - universities.

At the same time, the size of the younger generations is decreasing. The students can also freely choose where they want to study - in Finland, Europe, or elsewhere. Because of this, the emphasis is on quality rather than quantity. Thus, the number of universities is decreasing and the importance of ranking lists is increasing.

The key to the teaching quality is the number of students per teacher. In general, in Aalto the number of students per teacher is too high compared to our international competitors. Therefore, the number of student intake is decreasing. Also, the bachelor degrees introduced by the Bologna process has made it possible to focus more on master's level education.

Another trend in higher education is life-long learning. Graduates from the university are returning back to their universities to sharpen their skills. As alumni their are also actively contributions to the university as external teachers and research collaborators.

Universities have always been international. However, the above discussed trends have emphasized international visibility even more. To actively participate in local community, Aalto University has to have strong international visibility. The learning centers provided by the Aalto University should be open to all and they should have strong local presence. However, at the same time learning centers should be easy to approach by international students and scholars.

3. Performance of the existing facilities

- what works, what doesn't work

The existing facilities of Aalto University are not meeting the requirements of the future. While good things do exist, a major step towards better is needed. Here we will give few examples of facilities that do work but we try to highlight the improvement suggestions on the side as well. Furthermore, we will identify the possible reasons of what has made the examples to work and what should be considered in the planning phase of the futures' facilities.

Kipsari, a restaurant in the Arabia campus is a nice example of a place that works. Students have had their chance to shape its outlook and it has turned out to be something better and more personal than one could have imagined. A cozy and personal place to chat, meet and work while having the possibility to eat and drink something is definitely something to seek for.

Kesko-sali, in the Töölö campus is another example of a place where students meet. It lacks the personal feeling that Kipsari has and the place is hardly perfect in any way but still the simple idea of having a place to do group work makes it packed with students.

Several guild rooms in Otaniemi campus are working almost like the Kipsari in Arabia. A personal touch from the students has made them important and well-functioning places to work and

meet. However, the lack of space and specific purpose of the spaces has made them difficult for all of the students to access.

As a common challenge with the current facilities we conclude that they are too closed. Most of them are hidden from the outside world and the total lack of signposts makes them even harder to find. There is not enough of natural light inside and as a user you have absolutely no way of knowing does the place have enough empty space for you to work before entering the space itself. Furthermore, learning centres are not often centrally located and have not had enough of student touch in their design (like Kipsari has). Using students in the designing and creating instead of "Famous Architects" could be the essential ingredient in making the futures' learning centres the beating heart of the university.

Kipsari in Arabia



4. Case studies of exemplar facilities

- *what does each offer that is relevant to Aalto?*

In Finland, the libraries are seen as part of our national cultural heritage. As such, they play an important role in the making of the Finnish mental landscape. Libraries are open to all, they are places of interaction and knowledge, where anyone can seek for reliable information.

University libraries are maybe less known to general public, but nevertheless as important in their character of collecting and sharing information. For a modern campus, even more important is the aspect of interaction, where students can meet, study, work together, eat and hang around 24/7. Flexibility, ease of change and modification, quick "plug-in" possibilities and a variety of changeable lounges are key figures. The new Learning Centre should have the atmosphere of the Aalto Design Factory, scaled up for the whole University.

Exemplar facilities exist in the field of public libraries, as well as in university Learning Centres – the two categories are approaching each other rapidly. Some of examples are presented here.



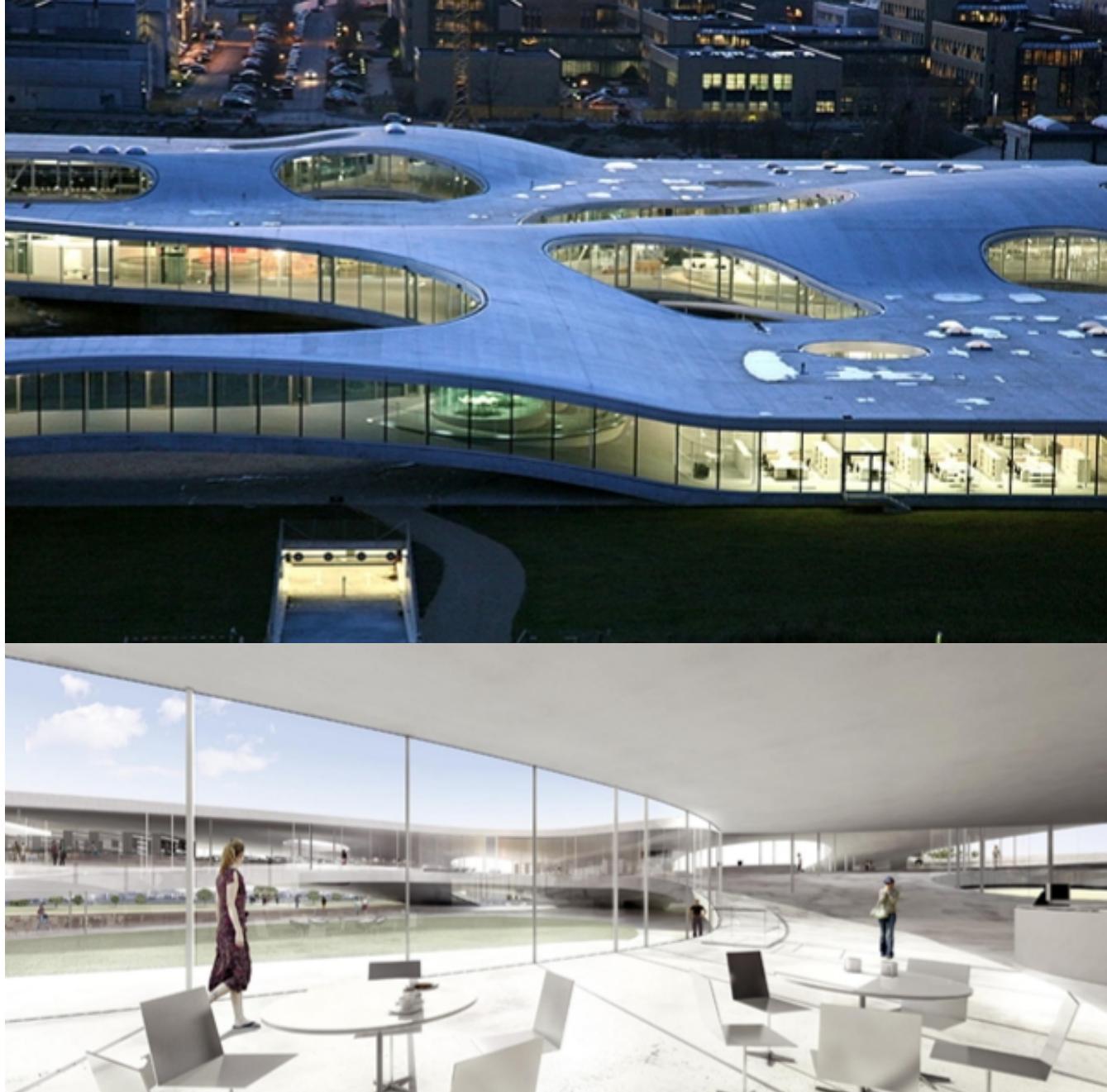
Sendai Mediatheque

Architect Toyo Ito's Sendai Mediatheque is a multi-purpose cultural centre made with steel tubular lattice structures. The building glows artificially from within and contains a library, art gallery, audio-visual library, film studio, and cafe. Through a series of extraordinary technical advances - floors supported by a system of occupiable hollow tubes and sophisticated information and media networks - the building creates an environment in which people can engage in cultural activities both internally, within the structure, and externally, through digital connections to the world at large. The centre also expresses Ito's obsession with lightness and his desire to strip away anything that reminds us of gravity. The building was completed in 2001.



Rolex Learning Centre in Lausanne

Built on the campus of EPFL Ecole Polytechnique Fédérale de Lausanne, The Rolex Learning Center designed by the internationally acclaimed Japanese architectural practice, SANAA, will function as a laboratory for learning, a library with 500,000 volumes and an international cultural hub for EPFL, open to both students and the public. Spread over one single fluid space of 20,000 sq metres, it provides a seamless network of services, libraries, information gathering, social spaces, spaces to study, restaurants, cafes and beautiful outdoor spaces. It is a highly innovative building, with gentle slopes and terraces, undulating around a series of internal 'patios', with almost invisible supports for its complex curving roof, which required completely new methods of construction.





Turku Main Library

The new city library in Turku by JKMM Architects is located at the historical centre of the city. The building is the latest addition to a block with the old library and several other historically valuable buildings. The historical and cultural value of the site presented a great challenge for the planning of the new building. The objective of the project was to create a new construct, which would harmonize with the historically invaluable setting while also manifesting an architecture of its own age. In terms of urban planning the goal was to fill out the open and unstructured street corner by following the edges of the existing urban grid. By constructing the building on the outer perimeter, we were able to provide an open space in the middle of the lot, which was designed to serve as a courtyard for recreation and a stage for cultural events. The interior of the new building is annexed with the existing 100-year old library building and the chancellery of the governor built at the beginning of the nineteenth century, now restored and transformed to facilitate a café and meeting rooms.

The new library has a functionally clear design. The guiding principle in the space planning was flexibility; the functions of the library may change radically in the future with the introduction of new media. The rooms are open, and the functions are limited only by the transformability of the easy-to-move furniture.





University Library of Otago, New Zealand

The Central Library is the major occupier of the Information Services Building (ISB), completed in 2001. Subjects covered: arts, humanities, commerce, education, physical education, socal sciences, theology, general reference.

The Library provides:

- 2,200 study places for readers in the ISB – 27 different types of study location
- 17 group study rooms, 5 group viewing rooms
- 131 PCs, 18 e-stops and 2 x-terminals give access to electronic resources of the Library (databases, e-Journals etc), the Web and University Computer Resource Rooms
- Ports to connect laptops to the network
- Nearly 700,000 items including: over 400,000 books, 2,788 print journals currently received, Special Collections comprising over 17,650 volumes, miroforms and audiovisual media
- 3 seminar rooms for teaching Information Literacy skills

Other occupants are:

- Student Learning Centre
- Proctor
- Campus police
- ITS Teaching Facilities Services including audio and video conferencing
- Student Information Services
- Careers Advisory Services
- Divisional Office (Information Services)

'Link' social learning space created in the gap between the IS Building and the adjacent Students' Union Building

University of Santa Clara, California

Newest academic library in the US – opened April 2008

19,400 sqm on four levels.

Over 1,100 reader seats in a variety of formats, including carrels, small tables, movable lounge furniture, and outdoor seating in the café and terraces.

Building consists of library, learning commons, technology centre

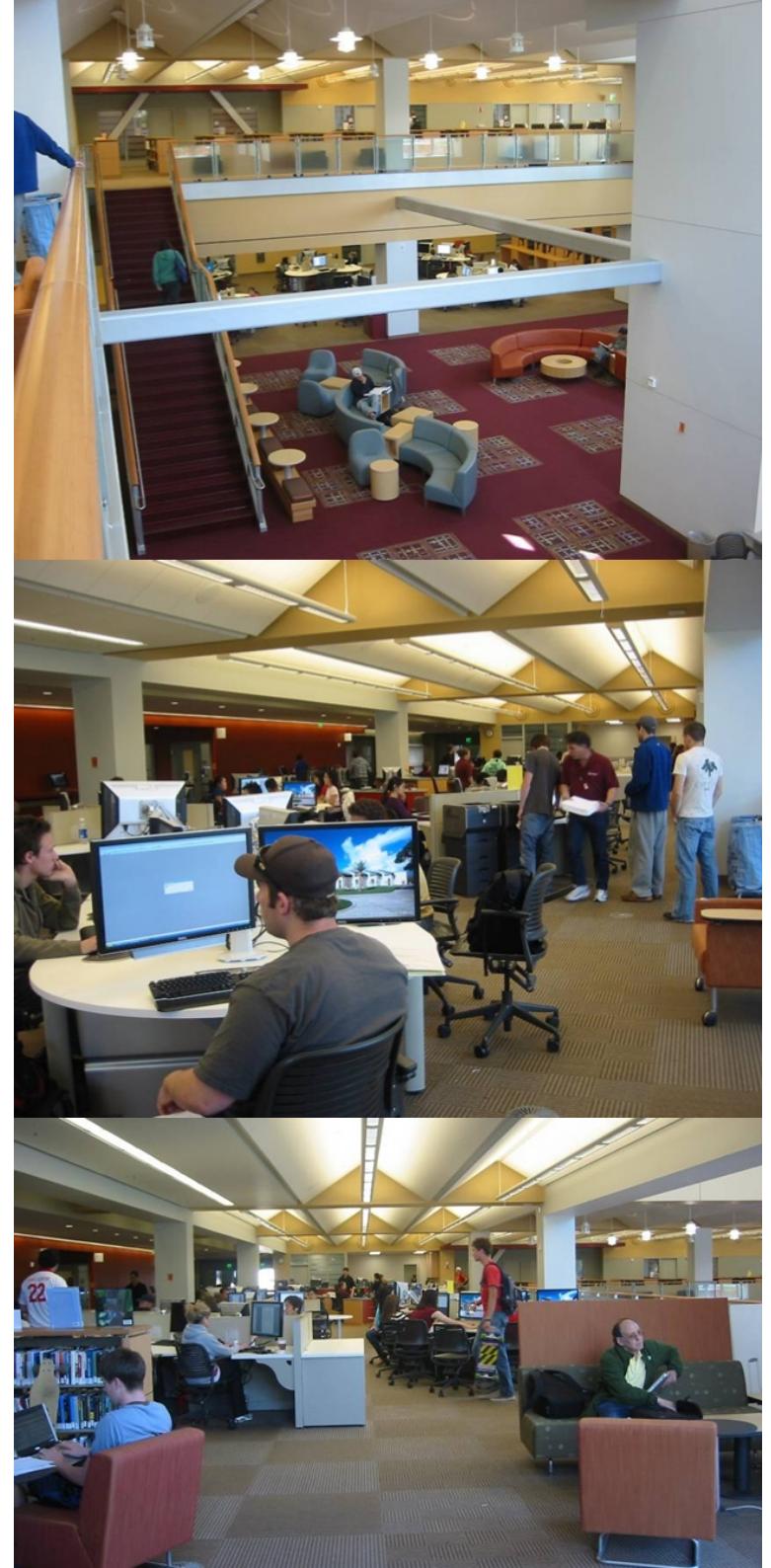
25 collaborative workrooms with walltalker® whiteboard wallpaper for floor-to-ceiling note-taking

68 high-end computers, 11 media stations, two assistive technology stations

Faculty development lab, multimedia lab, drop-in computer lab with dual-display computers, videoconferencing room, two training rooms for library and technology instruction, two video editing suites, three Educational Experimentation Rooms for testing new educational technologies.

Automatic retrieval system attached to library – 1 million volume capacity. Librarian estimates this reduced building area requirement by 10,000 sqm.

ARS was built adjacent to existing library, book stock moved onto ARS, library demolished, temporary service provided from ARS to temp library space, new library built, ARS reconnected to library by circulation desk, some books returned from ARS to stacks



Seattle Central Library

Seattle's new library was designed to be a vast "Living Room" for all Seattleites. Its twisted form was derived from both a continuous spiral of book stacks, as well as an attempt to maximize space within the strict height and setback restrictions. As the architect Rem Koolhaas states, "the ambition is to redefine and reinvent the Library as an institution no longer exclusively dedicated to the book, but as an information store, where all media 'new and old' are presented under a regime of new equalities."

Flexibility in contemporary libraries is conceived as the creation of generic floors on which almost any activity can occur. Programs are not separated, rooms or individual spaces not given unique characters. In practice, this means that bookcases define generous (though nondescript) reading areas on opening day, but, through the collection's relentless expansion, inevitably come to encroach on the public space. Ultimately, in this form of flexibility, the library strangles the very attractions that differentiate it from other information resources.



5. Descriptions of key spaces that should be provided in the future

A learning center

The idea of a learning center would not exist without the idea that a center could possibly enhance learning. But what then makes a center? The different actors the center unites and the different functions the center offers makes it a center. Hence, shortly, a learning center could be a node for different actors to meet each other and to access different functions for enhancing learning. In other words, in our minds, a learning center by definition does not mean anything literally physical nor virtual but it is something more abstract. In fact learning can be considered as a continuous process and learning center is a place that facilitates that process. Learning as a process is taking different forms depending on a discipline, a theme, a personal way to learn and other things. Most importantly, aims we use for learning evolve over time. Recently, technological tools have revolutionized the way learning happens but only partly. Chalkboards and social interaction is still present in learning. In arts and design and technical sciences even prototyping plays a key role. In learning center all these aspects should be present. To make our learning center continuously relevant it must be ever-changing reflecting appropriate, variable ways of learning. At the same time the learning center should provide exhibit learning and research results.

Now, thinking further the definition of a learning center as a node for different actors to meet other actors and to access different functions for enhancing learning. Here, the clear groups of actors in a university are students, professors, teachers, and other university stuff. As well, the actors can comprise representatives of other educational organizations and universities from Finland and abroad, various close research organizations, project partners, companies, entrepreneurs, representatives from financing institutions, politicians, etc. The functions could comprise Internet access, access to the data bases and information searching services, more traditional library services with the core collections, access to online academic skills resources, individual writing consultations, thesis writing support program, bibliographic evaluation services for research quality, and translation services. These could as well include educational centre services (ICT tools and services), services for e-learning, IT services for students and staff, e.g., video conference and telepresence facilities. Naturally, also "bread and water" in a high quality way must be available. In sum, learning center creates a node that facilitates learning, collaboration, co-creation and interaction. That node will gather positive crowd which must be ensured with appropriate personnel and resources.

Key spaces of a learning center

As opposed to a concept of a learning center, the key spaces do refer to something physical. The key spaces are, by definition, such spaces that are critical for the existence of a learning center, spaces that enable the different actors to meet and interact and to access the functions of the learning center. Broadly, all spaces enhancing learning of actors in a learning center can be considered key spaces. Needless to say, some of them are more important than the others, and the key spaces may be very different from one learning center to another.

Thinking in more practical terms, what spaces could then constitute a learning center? Naturally, we cannot explicitly answer to this question as the key spaces depend on the actors for whom the center is deemed to exist for. It is naturally quite impossible to provide an all-inclusive list of key spaces for Aalto University here, and we are not aiming at doing so here. Rather, the purpose is to articulate the idea of a learning center in a manner that, as a result of this work, there could be a concept for any group of actors in and closely associated with Aalto University to start rethinking spaces for enhancing learning.

In our discussions we identified several key spaces for the learning center. Next, these spaces are briefly illustrated:

Even though teaching spaces and facilities are provided everywhere in the campus area they play a key role in the learning center. In the learning center you will find learning spaces that are constantly reforming to create the optimal learning experience. They can also serve as a basis for development of pedagogic excellence in the Aalto University. And once good learning space concepts are found they can be spread out to other parts of Aalto network by applying the concept in other nodes of learning center. For teaching spaces it is crucial to identify and implement the idea of three layers of spaces:

- * public, like lecture rooms
- * semi-public, like workshop rooms, laboratories
- * private, like researchers working spaces

Special dimension related to learning-related spaces in the learning center is their use for events aimed for external stakeholders. For instance, special lectures by distinguished researchers or other visitors could be organized there. Moreover, we have number of other events which need sophisticated audio-visual equipment and even cinematographic equipment.

Each of these spaces need facilities and instrumentation to support learning. That is projectors, Internet access, chalkboards, whiteboards and all other materials needed. As we discussed this kind of set-up is traditional and easy to implement. However, thinking of facilities should be taken to a next level.

And the next level is the **information system**. In association with physical spaces we touched upon potentially more extensive and important theme related to space in the learning center and that is the information system we use for learning. Library services as such can be seen as information services for researchers and students. Today the number of books in libraries is diminishing rapidly due to the fact that usage ratio of books is in constant decline. Aalto campus libraries are not museums but platforms for information acquiring. However, Aalto has valuable collections that are preserved elsewhere. Contemporary search for academic information takes place in information networks increasingly. In our discussions we found that learning center should provide cutting edge user experience to support learning process of each individual. That means investing constantly in the development of IT systems facilitating information search and information visualization. Digital collections should be open for users through Internet. On the other hand, some digital collec-

tions and, in fact, activities within Aalto should be reachable in the Learning Center through advanced information systems in the physical space.

In larger context advanced information system could include features from social media (questions/answers, presence), positioning (locations of things and humans), reservation services for spaces, food&drink, specialist appointments among other things. By using contemporary display technologies this would allow superior user experience for all users saving time and effort of everyone.

When it comes to learning experience information services are one element. E-learning platforms providing lecture notes, exercises and even exams are a source for potentially immense efficiency gains. Learning Center should provide access to e-learning services, at least if not providing the full service and its development. Other related services are ICT support for educational tools, IT services for students and staff including video conferencing tools and facilities. All these kind services could be provided from ICT support center that is located in the learning center. ICT support center gathers always crowd and could create inbound traffic to increase social activity within the center.

Information systems are developing rapidly. In order to keep the Learning Center relevant and contemporary these systems should be developed according on a continuous basis.

Learning Center Functions

Central functions, necessary function:

- * Access to Internet
- * Self-study and study project places
- * Information searching services, online academic skills resources, individual writing consultations, thesis writing support program, bibliographic evaluation services for research quality, translation services
- * Access to digital libraries,
- * Social spaces: public, semi-public, private
- * Teaching facilities, educational centre services (ICT tools and services), services for e-learning
- * Lecture hall, both for lecturing, e.g., studia generalia and for cinema/media functions
- * IT services for students and staff, e.g., video conference and telepresence facilities
- * Cafes, restaurants, etc
- * Show room
- * Research projects, neutral spaces (nobody's)
- * Academic skills workshops

Secondary, add on functions:

- * Books, Journals, and other physical collections, resource library
- * Installations, galleries

Social spaces take different forms. Social spaces have much to do with the atmosphere of the learning center. Thus they are of high importance. Decency and appropriateness we emphasized in our discussions. Communicating societal role or high profile by these spaces would be an overstatement. If social spaces communicate Finnish straightforwardness and openness, it fulfils the ideal. Contemporary social space means also presence in social media or virtual reality. Aalto Learning Center will be the first places to build and experiment this in association to its other information systems.

Speaking about social spaces brought up concepts for cafes, restaurants and other facilities providing food&drink. This was without exception. Obviously high quality and personal food&drink facilities based on sustainable principles were at the core of the discussion.

One of the core spaces for the learning center would be a show room. As Wikipedia puts it "A showroom is a permanent enclosed space used to present a performance. Sometimes it will be customized for a particular show, for example" Aalto showroom needs to include sufficient instrumentation and flexibility in spatial organization to allow a wide variety of exhibitions and performances from arts to presenting highly theoretical research results.

When it comes to collective approach to the key spaces, there should be a code of conduct that ensures high quality and appropriate use of the space. If each user, even first-time user, is able to build a personal tie to the learning center overall security and losses due to damage to infrastructure would decline without mentioning the increase of usage ratios. On the other hand, spaces should be neutral for every Aalto stakeholder to use without prejudice.

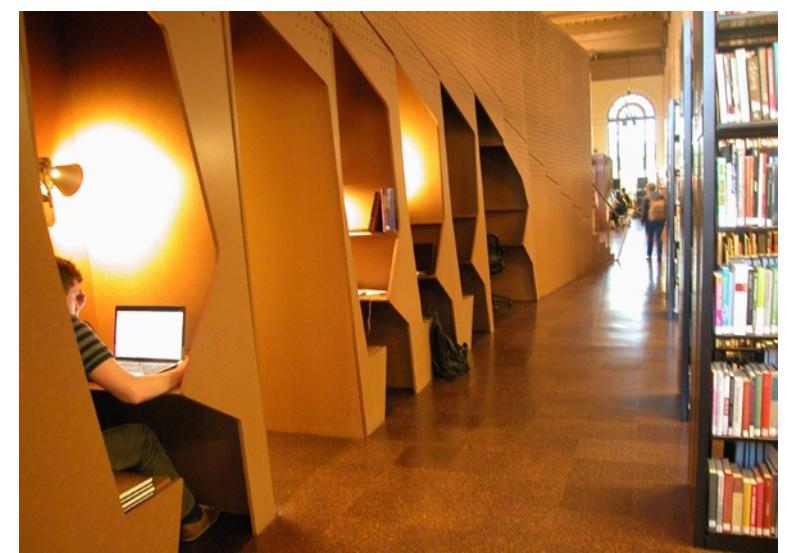
In fact, describing key spaces for the learning center has been done earlier in number of other occasions, plans and studies. We have similar places in Aalto campus even today. Perhaps they are not perfect and not called HUBs, but the idea is already among us. Therefore reorganizing and creating key spaces in HUB concept way is not far fetched and that that difficult to implement. The role of time is crucial in learning and the way learning takes place changes over time. Similarly the role of time is crucial for the spaces. Timewise, HUBs are never finished. Prepare to think HUBs that are permanently in a state of flux but yet stable and peaceful providing support for learning, all the time. That is what makes the difference.

A learning space in the library of Rhode Island School of Design

The key spaces and role of them in "good" learning centers - Examples

The purpose of this section is to further elaborate, through a few practical examples, the idea of a learning center and, in particular, the key spaces and role of them in forming a learning center.

Figure below shows a simple space for learning. A space underneath a staircase has been taken into use as a learning space for students. It could serve, for example, the need for students, while waiting for a lecture to start or a bus to leave, to access internet to check e-mails or concentrate on a study topic for a second in a clearly more silent environment than just sitting beside a table in an open space underneath of a staircase. The cost of setting up this type of a space is obviously not very high.



6. Hub

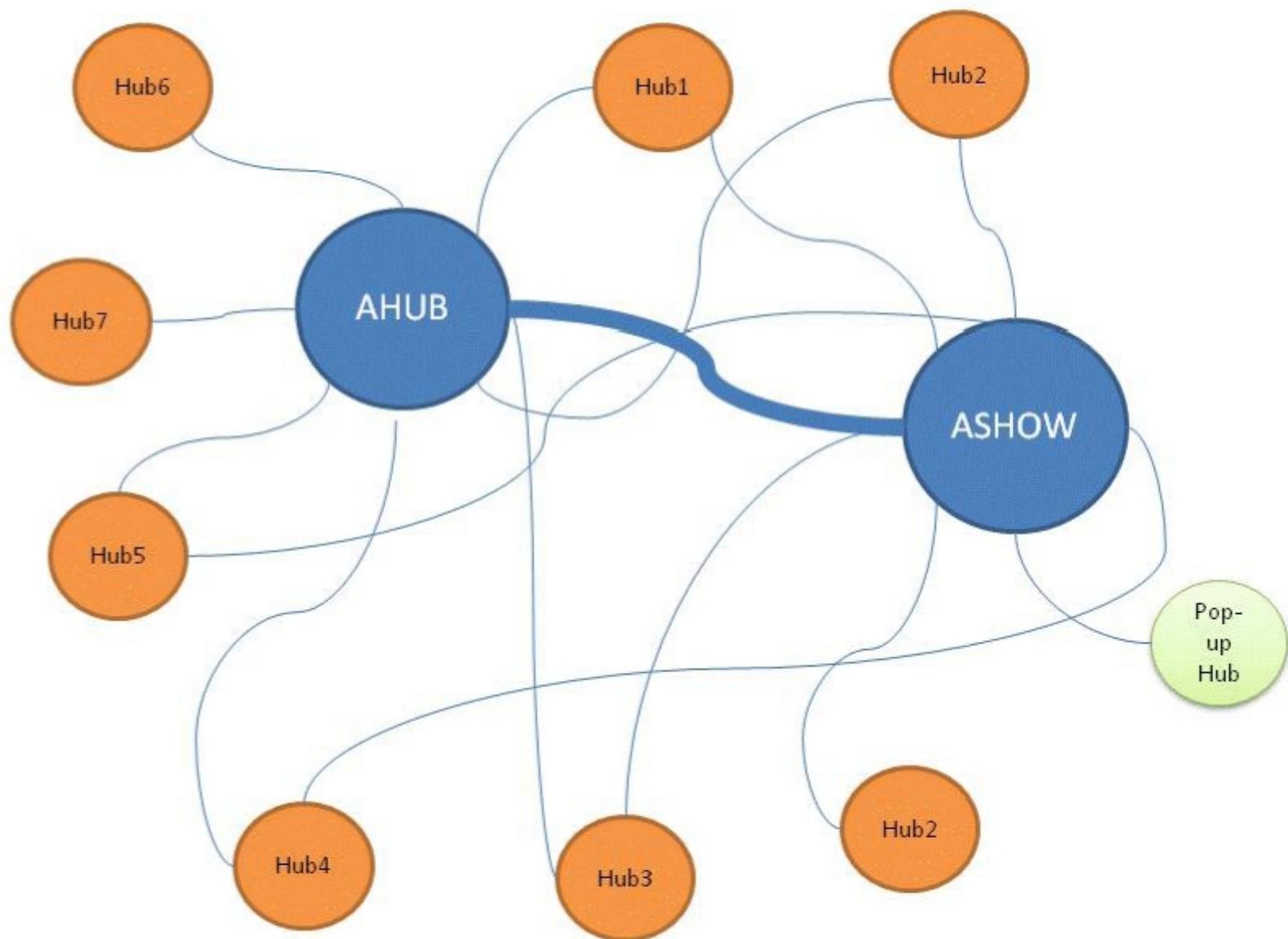
The hub for all the satellite learning centers of Aalto University would exist for filling the more general needs of the university. The decisions on the creating such a hub would be made based on the needs of the different schools and units of the university.

The hub could serve as an entrance point to the university. It could comprise access to certain specific library services and specific higher-cost technical equipment needed by the different schools of the university. The hub could contain learning spaces for students, and spaces for arranging meeting between academia and industry. It could be located in well-reachable, central point to become a natural contact point for students and other university stuff as well as other actors. The information services, signs, etc., would be available for visitors to direct them to a right direction. The student spaces would be made visible in the hub to provide indication on university space and spirit. Exhibitions of outcomes of the actual research topics of Aalto and any artistic works by Aalto students could be made visible to the people entering and/or passing the hub.

The hub could include and/or be surrounded by cafes and restaurants, and it could be filled with Aalto characteristic music. Lectures of studia generalia nature could be organized there, and possibly also some cultural events involving, for example, music and poetry. An example of a learning center hub of Lausanne is shown in figure beside.



Learning center hub in Lausanne



7. Thinking in and beyond campus

- Interaction with Society

Consider contemporary international networked society and Aalto campus as a network, you find that the learning center serves an essential node in that network. From the perspective of society at large the learning center is a natural access point and a space for getting the first touch and find avenues for further knowledge and learning. From Aalto network perspective "Learning Center Nodes" can be spread to every space that needs services outlined above both in Finland and, actually, abroad. Or do you think Aalto campus will be isolated hidden place? We discussed that Aalto Learning Center can even be seen as network of nodes with a hub. A hub and spokes -model as they say in airline industry.

To take this even further "Aalto Learning Center Nodes" is a network of networks that allows learning in an equal, open-minded way across all disciplines, themes and ways to learn.

Learning center kind of interaction and communication of Aalto activities, arts and research results could follow well formulated network concept which includes three-layers: Hub, Node/satellite and Pop-up Node.

Hub-concept was defined above. If the Otaniemi Hub is one of the central points of the Aalto Learning Centre network concept with coffee shop-satellites all over the world, the showroom "ASHOW", e.g., in downtown Helsinki needs to be centrally located with good connections to the airport, very

"Aalto" visible in the place, where people flow. It could be a place with basic coffee shop functions but it should be the very place for special functions: for exhibitions, conferences, festivals, presentations, installations, workshops, business contacts, student project exhibitions and displays, as well as Studia Generalia lectures by alumni. Presence in the core of the Finnish society and among people is of high importance if we want to create significant societal impact.

In addition to the HUB-concept, the learning center would be based on mobile coffee shop -concept, satellites, the Aalto branded -unit copied anywhere needed in the Aalto context, inside or outside the community with some basic portfolio of service products and added - if needed - with extra services tailored for special purposes: targeted to outsiders, potential new students, alumni, entrepreneurial services, professional development, interaction, communication. When branding Aalto sounds and smells are important. The campus coffee-shop satellites are home for the students and researchers but they are open to the community and discussing with the society. The environmental aspects could be emphasized with Aalto bicycles for rent and, e.g., electric car charging. The basic portfolio of services could include, e.g., cafe's, restaurants, working places, connection to e-library, e-sources, e-learning facilities and lifelong learning services as well as other Aalto-services and Aalto-shops.

Satellite hubs could be located everywhere where Aalto has activities. That is in other towns (Pori, Mikkeli, Lahti) and countries (Tongi, EIT ICT Labs, Singapore). Providing such a common and recognized entry-point with established services would



create trust for our contribution, enhance brand-building and most of all communicate higher education to all our stakeholders.

Much of Aalto activities are based on events and projects. Some of these activities are short-lived, pop-up kind. Pop-up hub would follow the concept and outlay of hub-network set-up and provide coherent framework to communicate and organize our activities where ever they are organized, e.g., in fairs, high schools, metro, Aalto Van, Aalto Ship.

All the Aalto Learning Centre -network is based on the concept of multichannel delivery of services in the Hub, In the Helsinki showroom and the coffee-shop satellites.

As operation of the learning center itself, also its interaction with the society can be seen as a process which is supported by the concept outlined above. In fact the process of interaction will play the key role here. If we care about our own people and our stakeholders and let that come through from the concept, this will fly. We did not go into process definition and design in our discussions. However, we did think of the learning center from user perspective as illustrated in the beginning of the white paper. Process part of the concept design remains to be discovered. It is worth bearing in mind that people makes it and staging gives support. And it can be the real differentiating factor.

8. Implementation

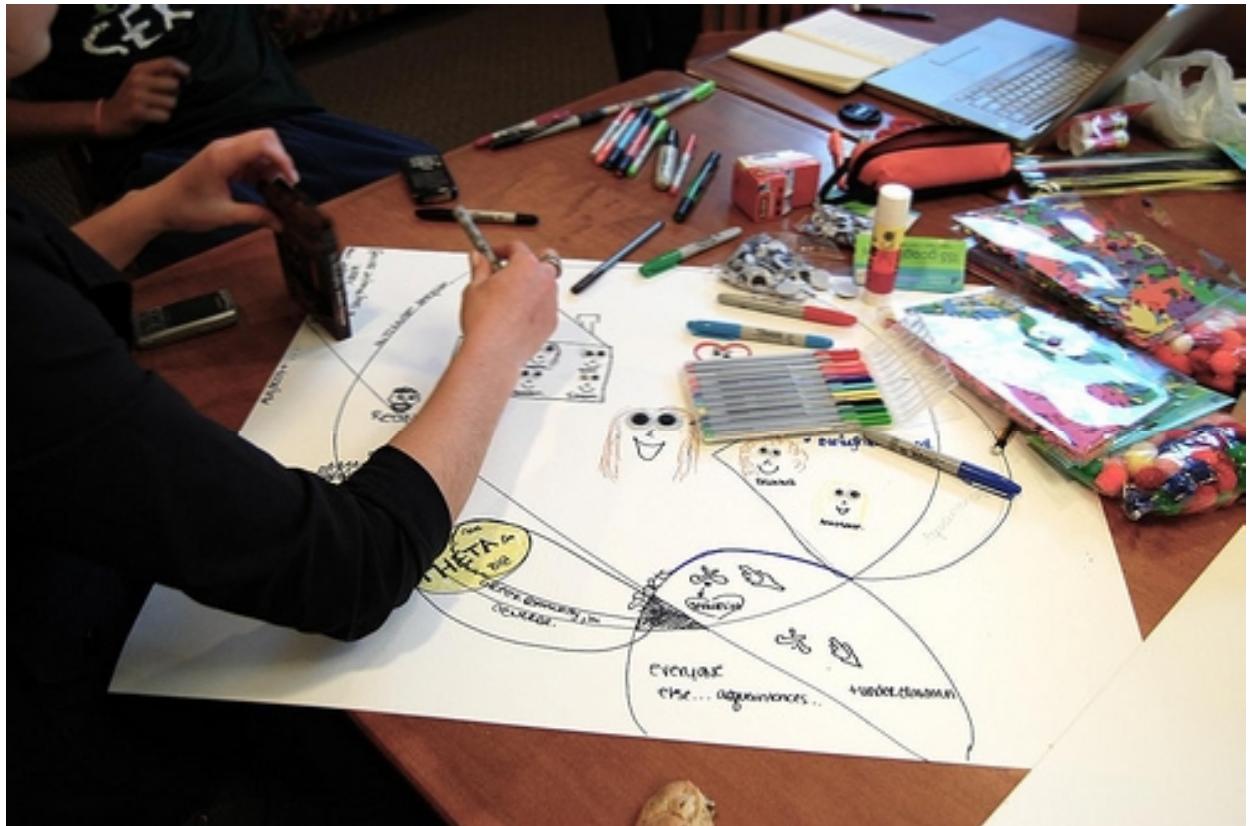
In this section, we give Instructions for all Schools and Aalto University as whole on how to implement learning centers. We do not try to define the exact action steps that need to be done, but rather give ideas how to start the creation of learning center. We focus especially on individual learning centers. The hub and the satellites can be implemented at the same time or later.

Student participation

Students have a critical role in the development of the learning centers. The learning centers should be based on participatory design involving students as much as possible. Students should be included both in design, implementation and operation of the learning centers.

Different kinds of student projects can be started already in fall 2011. Each department, school, and degree program should think ways to get students involved in participatory design of learning centers. These activities could be, for example,

- Student idea competitions
- Special workshop as part of 1st year studies
- Design of learning centers as part of student exercises and special assignments
- Joint workshop with personnel and student clubs



Continuous process

The development of learning centers should be a continuous and iterative process. The development of individual learning centers can be started in small steps. Schools can, for example, set up ad hoc groups or organize student activities.

The design of the hub and the satellites can also be implemented in small steps. The implementation of the hub and the satellites should be based on the experiences gained from the actual learning center nodes. Also, it is possible to first implement a temporally downtown satellite and later implement a more permanent downtown learning center.

The hub is a big investment. If the final campus vision includes a totally new learning center hub, enough time is needed for planning and possible construction of a totally new building. However, meanwhile it is probably possible to start with the existing facilities.

Portfolio of solutions

The learning center is a portfolio of solutions. It contains different kinds of functions for supporting interaction and learning. Each site does not have to implement every service. Also, there can be different kinds of implementations of different functions.

However, it is important that each learning center shares the same basic design guidelines and clearly belongs to the network of the Aalto learning centers. This allows the Aalto people and visitors to recognize the services and utilize them effortlessly.

At Aalto University level, the individual services should be collected together as portfolio of best practices. This requires collaboration between the individual learning centers and their active users.

Organization

The local learning center should be organized as grassroots movement. The actors (i.e., personnel, students, alumni, cafe managers, etc.) of the building, where the local learning center is located, should first select a group of volunteers, who start to plan the operation of the learning center.

In addition, there should be more official organizations both at the school and university level. Schools could nominate a person or a group of persons who supervise the operation of the learning centers. Together learning center representatives of different schools can form a peer group to discuss best practises, long term plans, etc.

Aalto Brand

Aalto brand needs to be clearly present in each learning center, whether it a actual node, hub, or satellite. Common design principles allow users to recognize similar functionality provided by the learning centers. This includes also digital signage and virtual services.



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