Co-working and innovation: New concepts for academic libraries and learning centres

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Abstract:

Purpose – The paper contributes to the debate on the development of academic libraries, by the introduction of the concepts of co-working and innovation to the learning centres.
Design/methodology/approach – The paper builds on published case studies and French initiatives.
Findings – The proposal of our paper is that the academic library can meet its social responsibility on the campus and in society by drawing on the model of the co-working spaces and communities, by the support of innovation and the transfer of knowledge to the world of work. Moreover, the proposal is to include these new functions into the concept of learning centre, i.e. to develop the work-related aspects of the learning centre.
Research limitations/implications – Future research on academic libraries should focus on social responsibility and their contribution not only to students' academic success but also to students' employability and to the transfer of technology.
Practical implications – The paper contributes to the development and marketing of new academic library services and to its strategic positioning on the campus.
Originality/value – Co-working and innovation are relatively new but promising concepts for academic libraries. Except for some recent case studies, conceptual papers are still missing that combine empirical experience with a theoretical approach.

A new role for learning centres

Why should students enter a library building? What does the academic library offer them so that they come over to it? For many years now, new technologies and the information market have fundamentally transformed academic libraries. Reference works, journals, books, theses and dissertations, databases, catalogues, reference desk, help and assistance etc – students can get them at distance, from their home, department, classroom, residence hall, café etc. They are used to smart technology, social networking, mobility, connectedness anywhere, anytime.

New models and concepts have emerged to increase the academic library's integration and attractiveness on the campus and to expand its role as a "great good place" (Oldenburg 1989). Students are put at the heart of the library, and pedagogy has become a major driver for library design. New ways of learning centred on autonomy, self-monitoring and personal knowledge management challenge the functioning of the academic library. Today, learning centres propose a new conceptual framework for the academic library's adaptation to the dynamic ecosystem of education and research on the campus. "Supporting and improving the quality of student learning" (Oyston 2003, p. IX), they help the

academic library to cope with the institutional strategy and demand efficiency and effectiveness to obtain scientific excellence and high-ranking scores.

Yet, today a university's performance and quality are also measured in terms of technology transfer and the students' employability. How does the university contribute to economic and technological development; how does the campus bridge the gap between the academic ivory tower, business and industry? Does it? Do the students gain employment; do they receive key skills, job advice and an understanding of the labour market? Beyond learning and teaching, social responsibility has become a major assignment for the academic community. "As consumers of higher education, (…) students have expectations that their university education will prepare them for future careers, and this service expectation is not limited to the classroom, but extends to all areas of campus" (Lumley 2014).

For the academic library, the question is not *if* it will contribute to reaching this objective, but *how* it will play its specific and significant part. The proposal of our paper is that the academic library can meet its social responsibility on the campus and in society by drawing on the model of the co-working spaces and communities, by the support of innovation and the transfer of knowledge to the world of work. Moreover, the proposal is to include these new functions into the concept of learning centres, i.e. to develop the work-related aspects of the learning centre.

Job-related skills

Learning centres are models of integrated services, digital resources and user-orientation. Their origin is not the library but life-long education and training and community development. Also, instead of shared or commonly accepted definition there are rather institutional experiments, local experiences and marketing concepts for new user groups and usages of public and academic libraries[1]. But above all, learning centres are buildings or rather, innovative architecture that provides "a seamless network of services, libraries, information gathering, social spaces, spaces to study, restaurants, cafes and beautiful outdoor spaces"[2]. They are a place to work alone or in a group, to learn, read, surf, eat and drink, relax, or even do nothing; a place connected to the world, to others, to Internet and social networks, a resourceful place, with access to documents, hard- and software, assistance, help and advice. A "third place" compliant with Ray Oldenburg's description: welcoming and comfortable, highly accessible, free or inexpensive, with food and drink, and with regulars such as staff - the great good place which is where we meet, socialize, share ideas with, and learn from friends and acquaintances who become part of our personal and extended community.

To make the academic libraries be an experience like a Starbucks may not always be realistic[3], yet one should keep the principle in mind: to provide a place that people will like on Facebook, a caring environment they will support, where they will return because they know they will have a good time, feel good and find what they want and need.

However, the great good place is not an end in itself, and the caring environment supports autonomy, collaborative work and information literacy. Most often,

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[1] For more details, see for instance the different studies published by Oyston (2003).

[2] Rolex Learning Center at Lausanne, Switzerland http://rolexlearningcenter.epfl.ch/page-34751-en.html

[3] But see the recent study on the *Information Commons Café* at the University of Sheffield by Hunter & Cox (2014) and their "Model of Zengagement".

priority is given to learning for the teaching program of undergraduate and graduate degrees. The objective is academic success. Yet, eager to help and accompany the students' achievement, libraries become aware of other needs and "hot topics" beyond traditional library services and resources. Technology transfer, job-related and enterprise skills are part of them. Also, some learning centres offer opportunities for the acquisition of job-related skills, such as career advice, CV writing, professional interviews, self-marketing, even financial counselling and personal knowledge management. The Saltire Centre at the Glasgow Caledonian University for instance offers patrons a one-stop shop called "The Base", a comprehensive desk with several services, far larger than traditional information services. Since "The Base" is a flexible area, the university can introduce new services to support new activities assigned to the Saltire Centre to students[4]. Other learning centres provide opportunities to meet and learn from employers. This may include workshops on project management or teamwork skills run by employers, or other events to make contacts and explore career possibilities. For example, the Toulouse Institute of Technology in France runs a document retrieval service for the local economy[5].

Also, the coaching suggested by some learning centres may extend counselling and guidance beyond the strict limits of information literacy, just as the staff from idea stores or information commons explore new territories of social outreach and helpful advice and information on health, learning, work, law, informatics, writing etc.

All these examples have two aspects in common:

- The academic library does not abandon its main goal and mission, e.g. to provide useful and valuable information for the academic community.
- In the new environment of learning centres, the academic library extends the concept of useful and valuable information further than scientific and technological information.

As we suggest in the following, this extension can take specific and promising forms. Learning centres can learn – and already do – from co-working spaces and innovation transfer.

Co-working spaces and learning centres

Ray Oldenburg was interested in the development of intermediate sites between work and home, adapted to urban individualized and mobile lifestyle. A crossover between easy friendly areas and worksites, the third place can be a railway station, a library, a bookshop or a café – in fact, any place where people meet and interact to increase their "personal benefits" and "greater (public) good".

Since it facilitates informal encounters and social interactions, the third place can be seen as a collaborative workspace, rooted in some basic principles such as openness, flexibility, usability and accessibility. Some third places with a clear focus on work are called "co-working spaces".

The concept of co-working

A benchmark study in France[6] showed that most of these co-working spaces bring together people from technology and digital economy, i.e., activity sectors

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[4] Saltire Centre http://www.gcu.ac.uk/theuniversity/universityfacilities/thesaltirecentre/
[5] Institut National Polytechnique de Toulouse http://www.inp-toulouse.fr
[6] Benchmark des espaces de co-working sur le territoire français, Innov'labs, Mars 2010 -2011, http://emergences-

where meetings and exchange are at the heart of creation, projects and innovation. These hybrid open community and work spaces foster the sharing of resources, skills, creativity, expertise and knowledge. More than just physical space, they can be defined by four characteristics (Deparois et al. 2010):

- Socio-professional: Flexibility and mobility are main qualities of new forms of work. Co-working spaces allow information to flow more smoothly and stimulate creativity. Besides resource sharing, they often highlight exchange and their human and accessible aspect.
- Economics: Co-working spaces are a showcase for sharing of material (space and equipment) and immaterial (knowledge, skills, expertise and experience) resources. When asked about their initial motivation to join a co-working space, people often argue cost reduction as their principal reason.
- Culture: Co-working spaces are part of a cultural movement, with a community working on collaborative projects. Collaboration is not an end in itself but a way of functioning. The "community culture" of co-working is driven by ethos of sharing, unstructured exchange, open access and the desire to live together.
- Space: They are also and above all physical sites where people come together, reference places where it is possible to meet, exchange, work and collaborate in a virtual world.

Opening multiple subjects and approaches replaces the segmentation of specialization. More than just some square meters of office space, the real strength of co-working lays in its holistic and dynamic creation of micro-networks, the real value is its "assisted serendipity (…) the informal conversations and the expert advice members are happy to offer one another"[7]. Unexpected and unintended encounters, conversations and informal contacts feed economic activity. "Co-working has a positive effect on creativity (…) by the mix of people participating, which creates a network of knowledge located in an open atmosphere that simplifies the creation of new ideas" (Muhrbeck et al. 2011, p.74).

Shared values are the basis of successful meetings. Each member of the co-working community has his or her own networks outside the co-working space, and these connections contribute to the synergy of sharing and capitalizing ideas and projects. They integrate innovation and renewal of traditional forms of social dynamics, and in this double dimension they are similar to horizontal business or service clusters sharing the same resources and knowledge. Sometimes co-working also transforms the functioning of organizations. For instance, "corpo-working" is a term of collaborative workspaces for employees that may be open to the customers and (also) serve as a brand showroom.

Functioning and dynamics

Each co-working space has its specific equipment[8] made for example of sewing machines, 3D printers, fax or mixing desks. Free Wi-Fi access is most important because of the need for connectivity and communication. Designed to be more informal than traditional office settings, they also provide coffee machines,

numeriques.regionpaca.fr/fileadmin/PACA_Labs_Groupe_de_travail/ecosyteme_numerique/Etude_innov_labs_-_PARTIE_1_BENCHMARK_-_FINALE.pdf

[7] http://www.reuters.com/article/2013/12/19/idUS6487063220131219

[8] See for instance the YFS Magazine 15 best co-working spaces for entrepreneurs in the US
http://yfsmagazine.com//2013/05/31/the-nations-15-best-coworking-spaces-for-entrepreneurs/#axzz2pqwQU8W6

kitchen and snack-prep areas, a comfortable lounge area, reading corners and so on. Other amenities are less material, such as business presentations, weekly seminars, support by staff (receptionists), exhibitions, project or product reviews, debates, conferences or brainstorming sessions (Spinuzzi 2012). All these events are designed to bring people together, to create a community and to support and foster synergy between businesses, start-ups, customers, artists and so on. Even if it may be hard to evaluate their impact, they are part of the nonstandard work arrangements and the added value co-working spaces offer to their members.

A potential source of economic development, they are often seen as a social innovation, providing a new and smart framework for highly connected and dematerialized work, while preserving the concrete and human aspect. They offer an interesting and innovative, even overdue alternative to office work and work-at-home, a response for increasing mobility, self-employment and entrepreneurship. The number of co-working spaces is increasing rapidly in France and throughout Europe and even if the reasons for their popularity may be multiple, people join them in particular because co-working offers opportunities to meet other people, to learn from them, and to work in a stimulating and creative environment - a framework less strict than the traditional work office paradigm but efficient and friendly. And for those who want to work at a start-up, co-working spaces can be "a great place to get hired"[9].

While centralization, specialization and segmentation were critical success factors for clerical work in the industrial era, today the community of co-working tends to establish a new model of poly-centricity, interconnection and enrichment. Yet, the reality of each co-working space is mostly shaped by its specific and unique community and the use they make of it[10]. Often, a co-working space will be conditioned by a particular business, an economic activity such as software development, multimedia or audiovisual design, with companies and start-ups in the immediate neighbourhood. There, one can meet other professionals, free-lances but also amateurs or even students.

Two recent examples are the NUMA co-working space in the heart of Paris, designed by Silicon Sentier as "a vital hub for industry players, fostering diversity, collaboration and openness, in order to help companies boost their performance and growth"[11] and the "Cantines" network in nine French towns, a kind of label for a French touch of local co-working and innovation[12].

Introducing co-working to libraries

Driver of change, melting pot of social and cultural dynamics, expression and instigation of the "wisdom of crowds" – the co-working spaces are at the edge of societal development, a kind of office futurism. Academic libraries as learning organisations, offering a package of technology, workplace, content and coaching, are becoming aware of the functional closeness and equivalency with the co-working concept and are starting to adopt their features.

This can be a simple transformation of library space into an "information commons" with "new collaborative workstations (…), allowing two to four people to sit and work comfortably in front of a single computer (…) multimedia stations

[9] http://www.reuters.com/article/2013/12/19/idUS6487063220131219
[10] See the rich co-working wiki http://wiki.coworking.com
[11] NUMA space http://en.numaparis.com/
[12] Les Cantines http://reseaudescantines.org/ (« cantines » in French means canteen or cafeteria)

(…) equipped with high-end graphics- and audio-capable computers and software (…) a Writing Center (…) adjacent to the (…) collaborative workstations (and) a café (…) along with comfortable furnishings in group arrangements" (Malenfant 2006, p.283). But this can also be "a 'bookless' library space, (…) a co-working space where social learning emerges as a result of people sharing the same workspace for their creative activities (…) conceived as a public community centre for peer collaboration and creativity around digital culture and technology" (Bilandzic & Foth 2013, p. 255), as at *The Edge*, an innovative "Digital Culture Centre" and prototype concept by the State Library of Queensland. Here, "smart space technology innovation, such as ubiquitous computing and ambient media" are designed to create a "place for people to meet, explore, experience, learn and teach, and share and discuss topics around creative practices in various areas related to digital technology" (loc.cit.).
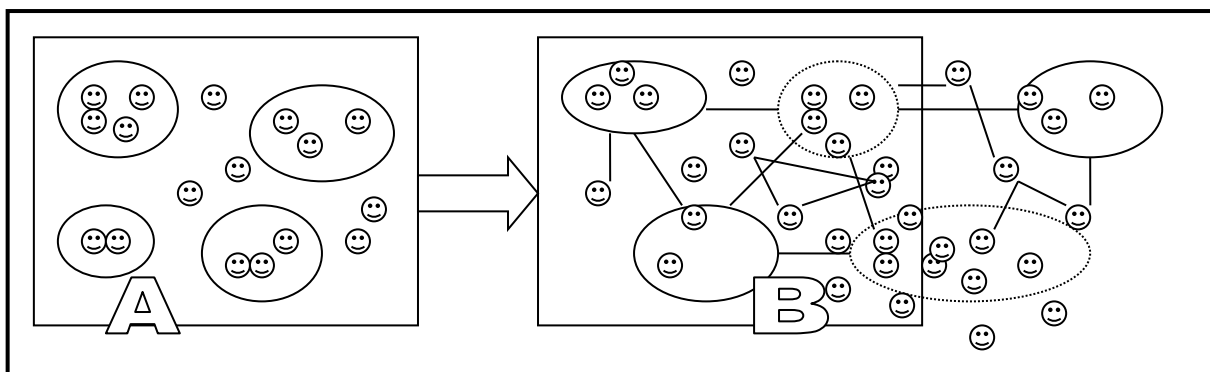

Figure 1: A sociogram of introducing co-working to the learning centre

Figure 1 illustrates the introduction of co-working to the learning centre that, as a learning commons is designed for individual or group learning (A). Co-working means creating links between individuals and groups, increasing the permeability of group boundaries and opening the space to individuals, groups and networks "outside" (B).

Co-working and public library obviously merged into a new, innovative third place. This already has an impact on the job profile – a new "co-working librarian" is born, with a role of development and assistance who "will be helping us to develop a philosophy and approach toward programming, which is the professional word for all the social, cultural and educational events and activities that support our co-working community."[13]

In the academic environment, in a different way but with the same philosophy of social innovation, the University of Tübingen is conducting, together with other German universities, a project called "Blended Library" that explicitly builds on the experience of co-working spaces (Bogorin & Siems 2013). Recently, Lumley (2014) described a co-working project within the academic library on the Palm Desert Campus of California State University, San Bernardino (PDC Co-working). The objective is to create an on-campus co-working community and to encourage student, faculty and entrepreneur collaboration and interaction while demonstrating the economic value of the library and showing new ways to imagine the academic library space: "Co-working communities are collaborative

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[13] http://cocomsp.com/2011/06/meet-meg-our-new-coworking-librarian/

workspaces where independent workers, entrepreneurs and professionals with workplace flexibility are able to work independently or collaboratively, as needed. By inviting these individuals into the academic library, we demonstrate the value of the 'creative class' to our local economy, model entrepreneurial behavior for our students, and show how the library can be a place of value for one's lifetime".[14]

Innovation and the transfer of knowledge

One of the university's objectives is to guarantee the understanding, dissemination and exploitation of its scientific and technological resources. That also means that the faculty must organize the transfer of academic knowledge to the economy. In this context, the French Ministry of Higher Education launched a new programme in 2013 to promote student entrepreneurship, which involves the creation of clusters for innovation, transfer and entrepreneurship on the campus.[15] In the United States, more than two-thirds of colleges and universities offer a course in entrepreneurship, but "while there is a widespread desire on college and university campuses to promote and develop innovative forms of entrepreneurship education, studies have proved that educational practices within the discipline remain fairly traditional (…) 'knowledge based'" (Lumley 2014).

Depending on the campus and the study program, students have more or less opportunities to meet and learn from employers. For instance, graduate employers may run workshops to help students build job skills such as project management or teamwork. Elsewhere, the faculty may organize career events with opportunities to explore career possibilities and make contacts.

Technological institutes, engineering schools and universities of applied sciences especially, invest in the transfer of knowledge and innovation, i.e. in the valorisation of research. This may take different forms, such as joint ventures, start-ups, patents or specific PhD scholarship agreements with the corporate sector.

So far and most often, academic libraries are not associated with those programs and initiatives, or are only on the margins. Yet, the potential is real and opportunities are there for different reasons:

- Community-based models in the public library sector, such as idea stores or community offices (Price 1997), show the way. They provide support to local initiatives and groups who work in a community development context, with mentoring and consultancy, training and capacity building, skills training, best practices etc., beyond the traditional library boundaries.
- Innovation has always been on the agenda of learning centres, as innovative library management, innovative architecture, and above all innovative education and learning (Bulpitt 2010). Isn't this the best condition to create a propitious environment for creation and innovation?
- Networking and group work are inborn qualities of learning centres. More than most other facilities on the campus, they are ready and prepared to integrate features of co-working and to encourage contacts between students, scientists, engineers and entrepreneurs.

The opportunities and strengths are there, but the academic library must promote and market its potential to obtain a clear political decision to develop

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[14] http://ala12.scheduler.ala.org/files/ala12/ALA%20Poster%20compressed_0.pdf
[15] http://www.enseignementsup-recherche.gouv.fr/pid25427/entrepreneuriat-etudiant.html

beyond its usual periphery, i.e. documentation. Defining a new organisational strategy may take time. In our own case – the innovation learning centre[16] on the campus of the Scientific and Technological University of Lille, France – it took three years to convince several kinds of stakeholders, such as the library staff, research management, scholars and students, local authorities, companies and excellence clusters, before the faculty settled the main objectives and allocated a budget.

Putting the focus on innovation and on the transfer of knowledge and research results, the new learning centre will contribute to the economic development of the Nord Pas-de-Calais region (north of Paris, on the Belgian border). Related objectives are openness to society, the promotion of scientific studies among High School students and new information services with high added value for the scientific community. Except for the last, all these are strategic and challenging goals far beyond traditional library management and marketing.

The transition is not easy, as Lumley's detailed case study on the PDC Co-working project confirms. Not only is such a project very time-consuming but it must also cope with different and sometimes antagonistic expectations: While some "(…) students value the communal nature of serious quiet study in the company of others, but are not interested in their library becoming a social place open to noisy collaboration" (Lumley 2014), others are looking for a place to discuss or just to relax. Co-working is but one part of the library offers. The challenge is to transform these antagonistic expectations into a new service quality.

Towards new models of the learning centre

Learning centres are customized solutions with some common features, such as the "great good place spirit", a unique gateway to resources and services etc. (Pineau 2011). The learning centre concept is polymorph, not unique or homogeneous, and it embraces a broader scope than the traditional academic library. A French report considered them as a landmark development of academic libraries[17], a triptych involving an integrated and expanded service offer, a physical and often symbolic place, and an effective and reactive organization (Jouguelet 2009).

Yet it is all but a static concept. Co-working and innovation will modify the first generation learning centres. Both are not academic but social and economic models, and they change the way of thinking concerning academic libraries. Up to now, academic libraries were considered as hybrid libraries because of the dual character of digital and print resources. In the future, hybrid will take on another meaning: still an information commons for the academic community on the campus, but also and more and more open to society and culture, open to business and industry, open to start-ups, entrepreneurs and innovators, a place of encounter, learning, working and creation. Still a local player, but already facing global challenges.

How could this work? Here are some elements from the innovation project in Lille.

Showcase: The learning centre will provide a showcase for regional excellence in scientific and technological innovation, for local start-ups, campus-based societies, research laboratory, excellence clusters, industrial R&D etc. The

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[16] http://doc.univ-lille1.fr/Learning-Center-Innovation/
[17] http://www.letudiant.fr/educpros/enquetes/que-cache-la-mode-des-learning-centers/la-cpu-et-la-cdc-publient-leur-guide-du-learning-center.html

showcase will help to develop the local and regional economy, create contact opportunities and promote the students' ability and motivation to innovate.

Encounter: It will offer flexible virtual and real meeting space for students, scholars, scientists, entrepreneurs, creators and, start-ups. Real meeting space may implicate an Internet café and large opening hours. Virtual meeting space means social media, project servers, wikis and so on, tools that are not necessarily controlled by the library. The aim is to facilitate and create occasions for mutual learning, co-working and exchange of ideas, techniques and tools.

Access: The learning centres will develop and apply new tools to facilitate the access to knowledge (data, research results, publications…). This may involve research information systems that allow for identifying research projects, topics, teams, patents etc.

Experiment: The learning centre will remain a space for educational innovation, offering opportunities of new forms of teaching and learning.

Popularization: Popular science, popularization of academic research and scientific results will be part of the new model. Events, conferences, round tables and debates will target greater and public audience and promote innovation and scientific education. In particular, connected to innovative companies, the learning centre will organize workshops of experimental and applied research for High School students in order to increase the university's outreach and attraction among the next generation.

What learning centres can and must learn from the co-working experience and from innovation incubators and labs, is the need for trained staff for community building, animation and assistance, the techniques of community management and networking, the mastery of tools and space, information coaching. Academic librarians already do networking, on the campus and on the web. But are they ready to develop "marketplaces for networking practices" (Brinks 2012) in the environment of innovation, knowledge transfer and popular science? Are they ready to become a kind of social hub of science?

What learning centres must also learn is the need for a real community which goes beyond welcoming groups of students. Community means people from different sectors and with different projects and interests and capacities coming together, using the same space and tools, eating and drinking together, discussing, learning from each other. This is different from the information or learning commons insofar as it is not only customized service for students. Co-working places the focus on a shared working environment, shared values and the establishment of a co-working community, which will create a new dynamic for the academic library.

Figure 2 shows some essential features of this "second-generation learning centre", a model built on three pillars – user-centeredness, library-based, and open to society – and held together by community building and networking.
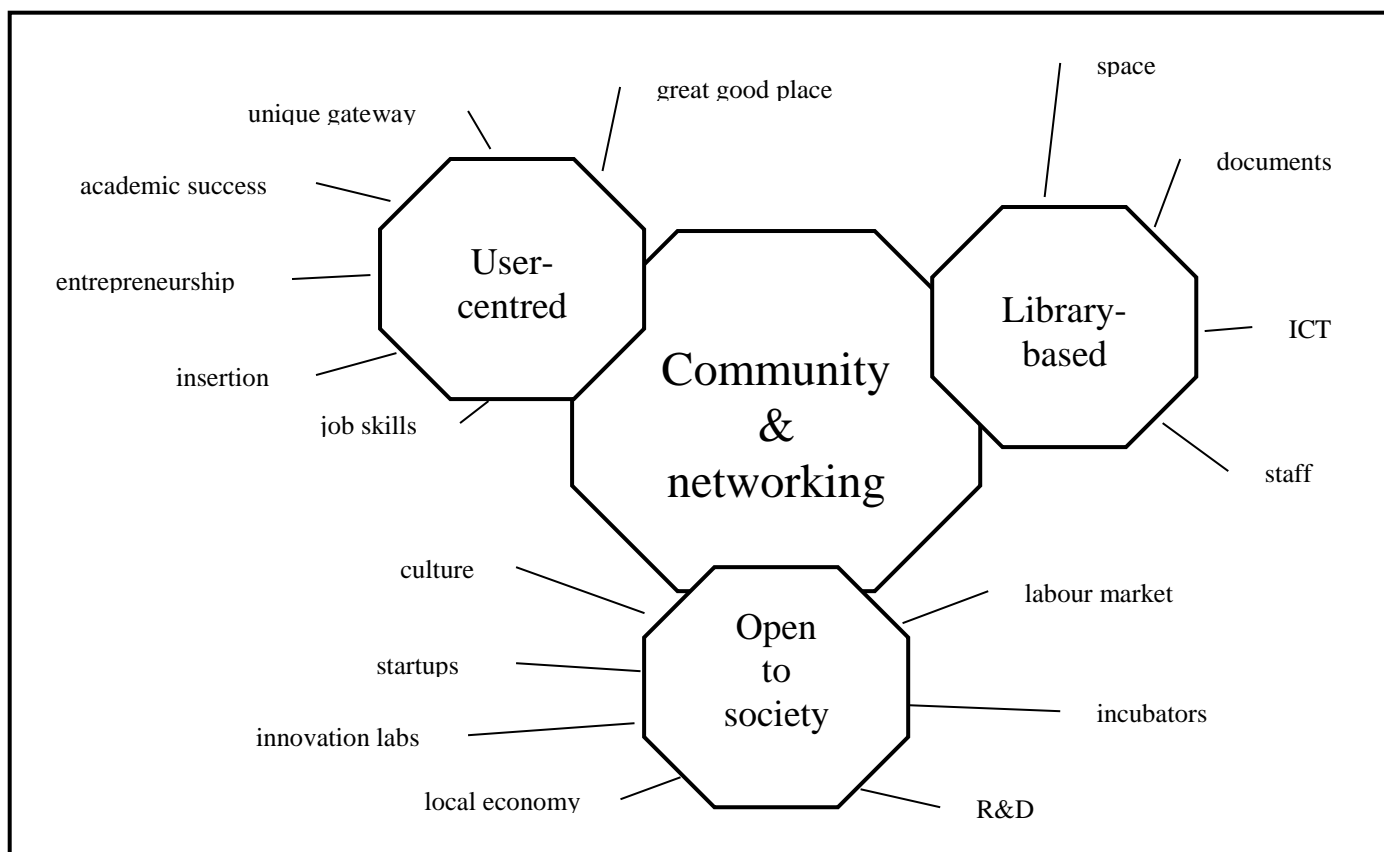
Figure 2: Second-generation learning centre

This second-generation learning centre or "social hub of science" is different from other initiatives in three ways: it shifts the focus from the individual (student) to the community (students, staff, faculty, employee, entrepreneur etc.), from learning to co- and networking, and it opens the campus to society.

Finally, as a kind of academic field experiment on the campus, these new models need evaluation and marketing based on a neat collaboration with users and stakeholders and on qualitative survey methods such as focus groups, storytelling etc.

Conclusion

Time is running out for academic libraries locked up in historical print-world routines. After the interlude of digital or hybrid libraries we are seeing new forms of academic libraries, explorers of social responsibility and information services that may be (and surely are) just a prelude for new developments on the campus, a "melting-pot" (Bulpitt 2010) of different and highly integrated services, centred on the user, including vocational success and open to society and industry. For the moment, there are but few projects of this kind, and even less achieved examples at least in France. Yet, the potential is real.

The proposal of our paper is that the academic library can assume its social responsibility on the campus and in society by drawing on the model of the co-working spaces and communities, and by the support of innovation and the transfer of knowledge to business and industry. Integrated into the learning centre, these initiatives can contribute to the enhancement of the students' working abilities, job skills and employability on the labour market. Yet, one size

does not fit all and each library must develop its own project adjusted to the specific ecosystem on the campus.

The second-generation learning centre will be neither social nor communal (Gayton 2008) but both, and more. A hypermodern place and at the same time, an antidote against social atomization and potential loss of direct contact and relationship (Moriset 2011), it will be a great good place for students. But it will be more than a third place: the new model will have the potential for the academic library to become (again) the heart of the campus, a "brand" inspiring people and bringing them together[18], at the crossroad of learning, working and innovation.

Is this still library? Should all these new "learning zones", "learning resource centres", "learning hubs" and other "learning centres" still be called "library"? The answer is "No" if and as long as library mainly means books, journals, catalogues and databases, reading rooms, reference desks and silent individual work. But if the library is considered in a more general way as a place with information resources, working tools and learning opportunities, i.e. in its basic functions and values of scientific methodology, open-mindedness and intellectual freedom, the answer is "Yes". Yes, these new learning centres will still be libraries, and moreover, they will form one crucial part of the experience of the 21st century academic library experience.

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[18] See the description of co-working space http://www.reuters.com/article/2013/12/19/idUS6487063220131219