

Nordic Study Labs

- Final report -



University College



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Preface

“The Nordic Study Lab” project has exchanged Nordic experiences within development, organisational embeddedness and management of what the project denominates “Study Labs”, i.e. physical learning centres in areas with a considerable distance to educational institutions.

Based on a project partnership which represents many different educational actors, through study visits in the various partner countries and national pilot projects, the project has exchanged and generated important knowledge on different ways to establish locally embedded learning centres. This final report communicates the experiences from the various visits and presents basic concepts which can be used across the Nordic countries for continuing the work on developing learning concepts that can match the challenges in the local areas in which the distance to formalised education is long.

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Danish abstract

Denne rapport dokumenterer Nordplus projektet The Nordic Study Lab. Projektet har haft til formål at udveksle eksisterende viden blandt projektdeltagerne om etablering og drift af distribueret uddannelse med særlig fokus på læringscentre. I løbet af en serie af studiebesøg har partnere fra seks nordiske lande udvekslet erfaringer med at drive uddannelse på distancen. Samtidigt har de dannet et netværk til gensidig inspiration og erfaringsudveksling der fremover vil kunne danne baggrund for initiativer og projekter omkring læringscentre i norden.

For lavt befolkede og fjerntliggende regioner er adgangen til uddannelse afgørende for lokalsamfundenes mulighed for vækst. Mulighederne for at skabe lige adgang til uddannelse er i høj grad øget med mobil teknologi, internet hastigheder og virtuelle uddannelsesløsninger, men disse nye teknologier transformerer samtidigt gamle udfordringer med at skabe kvalificeret uddannelse på distancen. Nordic Study Labs projektet har afsløret et rigt reservoir af eksisterende erfaringer, med et stort transferpotentiale og både unikke og eksemplariske løsninger på uddannelses- problematikker. Mange af de nordiske lande har mange års succesrige erfaring med distance undervisning, læringscentre og lignende tiltag. Der er derfor gode argumenter for at opmuntre til erfaringsudveksling blandt de nordiske lande. Et eksempel på et værdifuldt samarbejde i nationalt regi er det svenske netværk NITUS - et samarbejde mellem cirka halvdelen af de svenske kommuner.

Rapporten beskriver erfaringer fra alle seks partnerlande og de unikke problemstillinger som de forskellige løsninger er indlejret i. Nationalt, regionalt og lokalt står de deltagende lande i projektet over for sammenlignelige udfordringer og hver af casene giver et indblik i lokalt betydende faktorer og den særlige kontekst der muliggør og begrænser de løsninger landene er fremkommet med. I rapporten peges på tre overordnede begreber 'Vejledning,' 'koblinger' og 'kortlægning' som nøglemarkører for forståelsen af læringscentre. 'Vejledning' drejer sig om at guide borgerne henimod intelligente uddannelsesvalg. 'Koblinger' handler om at binde lokale aktører sammen i netværk og 'Kortlægning' handler om at læringscentret afdækker konkrete behov i lokalsamfundet.

Rapporten afsluttes med at anbefale:

- Et omfattende kortlægningsarbejde af det lokale behov for uddannet arbejdskraft
- Anvendelsen af ressourcer til at oprette og fastholde koblinger mellem forskellige aktører i lokalsamfundet
- Understøttelse og stilladsering af studerende og potentielle studerendes vej igennem det pågældende lands uddannelsessystem

English abstract

The present report documents the Nordplus project The Nordic Study Lab. The purpose of the project is the exchange of existing knowledge among the project participants on how to establish and run distributed education with particular emphasis on learning centres. Through a number of study visits, partners from six Nordic countries have exchanged experiences in running distance education. Simultaneously, the partners have established a network for mutual inspiration and exchange of knowledge, which in the future may serve as a starting point for initiatives and projects focusing on learning centres in the Nordic countries.

To sparsely populated and distant regions, access to education is pivotal in creating opportunities for growth within local communities. The opportunities for equal access to education have increased with the advancement of mobile technologies, Internet velocity and virtual, educational solutions but, simultaneously, these new technologies transform well-known challenges of offering distance education of a high quality. The Nordic Study Lab project has revealed a rich reservoir of existing experiences that entail both great transfer potentials and unique as well as exemplary solutions to a number of educational challenges. Several of the Nordic countries have many years of successful experiences with distance education, learnings centres and similar solutions. For this reason, exchange of experiences should be encouraged among the Nordic countries. An example of valuable collaboration within a national setting is the Swedish network NITUS, which fosters collaboration between half of the municipalities in the country.

The report describes the experiences of the six partner countries and the unique challenges behind the chosen solutions. The challenges faced by the partners are comparable on a national, regional and local level, and each case sheds light on locally defining factors as well as the unique context that renders possible and at the same confines the solutions offered by each partner. The report points out three general notions, 'counselling', 'couplings' and 'mapping', as key markers for understanding the concept of learning centres. 'Counselling' relates to guiding citizens towards choosing an appropriate education. The notion of 'couplings' refers to the collaboration between different local partners and 'mapping' relates to the role of learning centres in mapping local needs for employment.

Conclusively, the report presents the following recommendations:

- Extensive mapping of local needs for skilled labour
- Application of relevant resources that support the establishment and maintenance of couplings between the partners within the local community
- Support for and scaffolding of potential applicants and students as they move through the educational system

1.0 Introduction

Education is the key to growth. To many sparsely populated and distant regions this insight is pivotal, especially in the light of the recent tendency to centralise educational institutions. The challenge of creating equal access to education for all is far from new, but the advancement of mobile technologies, Internet velocity and virtual, educational solutions for a wide range of educational activities has re-actualised the issue and offered new hope in relation to all citizens gaining access to high-quality education through a fine-meshed distributed network of distance education. Study Labs or learning centres constitute a format for the distribution of education with the potential to solve many of the problems connected to distributed education. The present report documents the project "The Nordic Study Lab", which has analysed various formats for learning centres in the Nordic countries.

In the project, partners from six Nordic countries (Denmark, Sweden, Norway, Iceland, Greenland and the Faroe Islands) have exchanged experiences in relation to the establishment and operation of distributed learning centres.

The exchange of experiences was realised through study visits at centres, institutions and companies in the six participating countries. During the visits, the participants were introduced to the challenges that the individual countries face in the establishment and operation of learning centres and the solutions that the countries have found and the multifarious set of problems to which the learning centres are the answer. Thus, the project participants had a unique opportunity to find inspiration to innovate, transform or initiate learning centres in their own country. Simultaneously, the project established a network between the participants for collaboration on future exchange of knowledge and idea generation.

Nordic Study Lab is a part of and is co-financed by The Nordplus Horizontal Programme, a cross-sectorial programme under the Nordic Council of Ministers, 'Norden'.¹

The programme supports innovative projects across the traditional categories and sectors which encounter new, wide and complex challenges of a lifelong learning perspective.

1.1 Purpose of the project

The purpose of the Nordic Study Lab project is to exchange current knowledge amongst the project participants on the establishment and operation of distributed education with a special focus on learning centres. For this purpose, throughout the project, a network is established for the exchange of experiences and increased collaboration which, on a long-term basis, renders possible the structure and generation of new knowledge in the area. The participating partners represent a wide range of various educational solutions on different levels and from different sectors. Each partner contributes to the project by multifaceted experiences. The exchange of these experiences across geographical, national and cultural boundaries constitutes the core of the project.

In a wide context, the project also strengthens the collaboration on educational challenges in a Nordic context. At present, the possibility for the Nordic countries to utilise each other's educational resources is relatively limited. Closer relations will provide mutual access to vast educational and learning resources. In order to be able to establish such collaborations, it is necessary to understand the complexity of the networks that constitute the infrastructure for couplings. Therefore, it is necessary to produce more knowledge on the possibilities emerging in connection with the advancement of technology and on how the actors involved develop their organisational readiness to support such couplings.

¹ See <http://www.nordplonline.org/>

In addition to this, there is a need for understanding how the new formats, such as blended learning, MOOC, distance learning and virtual education affect the possibilities of offering educations.

The direct focus of the project is Study Labs (or learning centres). For a definition of learning centres, see below. The study of various formats and implementations of learning centres constitute the structural part of the study visits made throughout the project.

1.2 The organisation of the project

The project was executed by a consortium under the management of Holbæk municipality, Denmark. Partners from six Nordic countries participated in the consortium: Greenland, Iceland, the Faroe Islands, Sweden, Norway and Denmark.

Each partner was responsible for arranging a programme for a study visit in their own country in collaboration with Holbæk municipality.

- The partners from Greenland: Qeqqata Akademi/Piarsarsarfik and Teknikimik Ilinniarfik.
- The partners from Iceland: Miðstöð símenntunar á Suðurnesjum
- The partners from The Faroe Islands: Føroya Handilsskúli
- The partners from Sweden: NITUS
- The partners from Norway: Campus NooA
- The partners from Denmark: Holbæk municipality, Odsherred municipality, Kalundborg municipality and University College Zealand.

Primarily, the activities in the project were study visits in which transnational workshops, expert presentations, visits to educational institutions, video conference meetings, discussions on plenum and reflections were included.

The above activities were executed in the period from August 2015 to and including July 2016.

The project ended with a conference on the 2nd of June 2016 with a special programme for the partners the day before and the day after.

Furthermore, the project has gathered a series of experiences on a website:
<http://studylab.holbaek.dk/>

1.3 The methodical basis of the project

The participants of the project face comparable national, regional and local challenges. In the respective countries there are areas with a decreasing population, low educational level and challenges for the local business community, such as lack of skilled labour and the need for facilities that can be considered to be a part of modern life (access to schools, institutions, continuing education, entertainment, etc.). Many of these challenges are linked to an actual or experienced distance (geographical, mental, cultural and practical) to education, jobs and benefits. The participating countries have presented completely different solutions, displaying variations in basically every possible parameter. The solutions have various implicit and explicit objectives, methods, resources and infrastructure (political, financial, geographic) and needs. In particular, there is a big difference in the user groups

which the learning centres address, and the facilities, locations and learning resources available. Simultaneously, the learning centres operate in different contexts with different interested parties. In other words, the solutions that the various countries presented are closely interlaced with local needs to such an extent that direct comparisons are conceptually complicated and to some extent unproductive. As a consequence of this, the research group chose to collect the empirical data inspired by Bent Flyvbjerg's theory on cases (2006). No attempt is made to construct an ordinary 'theory' on learning centres in order to describe what must apply to an 'average' or representative learning centre. On the contrary, each of the participating countries is described as different types of cases, giving information on specific or special conditions. Several of the participating countries can be described as 'extreme cases' which provide an insight into especially problematic and/or successful learning centres; other learning centres can be designated as 'critical cases', allowing logical conclusions on what must apply to the learning centres of the type 'if it does (not) apply to this, then it applies to all (neither) of them.' Finally, especially Swedish experiences turned out to be, in comparison to Danish conditions, 'paradigmatic' with the potential to setting the agenda. All in all, the various cases present a full-scale varied image of different configurations and contextual factors for learning centres. The case approach fits the project's cross-sectoral, cross-educational level approach well, as it renders possible the analysis of different contextual markers, such as where and when the learning centres take place, who facilitates them, which resources and materials are available, the target group, and which pedagogical, organisational and strategic choices are made. It thus becomes possible to observe the various ways of solving comparable problems across national and cultural boundaries without initiating costly parallel analyses.

In addition to observations captured in the following case descriptions for the respective countries, a series of semi-structured interviews (Kvale, 1996; Cohen, Manion & Morrison, 2000) were analysed thematically (Braun & Clarke, 2006) with a view to disclosing patterns. These are first and foremost included to the extent that they proved to be relevant in relation to saturating the analysis work with the various cases, as the importance is attached to disclosing what the various actors *do* in the case, as opposed to what they *say* they do.

Concurrently with the case observation work, extensive desk research and literature reviews were performed. This knowledge will be presented in the following section. It was necessary to look broadly at the literature, as learning centres and related concepts, cf. the above, cover many different types of structures. While working with the literature, the researchers used key word search and citation chaining (Phelps, Fisher & Ellis, 2007).

The following section includes an introduction to learning centres in general, based on the performed literature review and three general themes, which the research group has chosen to work on, from the empirical data. The three themes are 'coupling', 'counselling' and 'mapping.' The meaning of these themes will be explained in the section 'Introduction to learning centres' and will be subsequently used in the case descriptions from each of the participating countries. In the section 'conclusion and recommendations', the various cases are linked together, based on the themes, and recommendations will be presented for the future work on exchanging and generating knowledge on distributed education in the Nordic countries.

2.0 Introduction to learning centres

The following includes an introduction to learning centres in the way that the phenomenon was defined and understood by the project. The definition forms the basis of an extensive literature review of various initiatives, which demonstrate 'family resemblance', as the philosopher Wittgenstein calls it. This means that they do not necessarily have a unifying definition, but various recognisable features linking the examples together in all directions. The description of the learning centre as an educational format falls into four parts. The first part lists four basic characteristics in relation to the definition of a learning centre. Based on international literature, the other part lists a series of key variables, whereby different profiles or types of learning centres can be identified. The third part reviews analyses from Swedish experiences with learning centres and the central functions that these centres manage, and finally a model will be briefly presented, suggesting a way in which to convert these abstract functions into specific directions for action in relation to design and redesign of the learning centres.

2.1 What is a learning centre?

In the Nordic Study Lab project, a learning centre is defined from the four below-mentioned criteria:

- A) Learning centres are **physical** locations. Places where the citizens can go to meet other citizens who also want to study. Thus, learning centres are not an online platform or education portal.
- B) A learning centre is **digitally coupled** to educations. These couplings can be initiated in various ways, including e.g. the possibility of synchronous coupling through telepresence or asynchronous coupling through MOOC. The key issue for this criterion is that the coupling occurs between the learning centre and the educational institution.
- C) A learning centre can be facilitated, but has **no teachers**. The teaching is not performed in person at the learning centre, but through couplings, as described in the above. By contrast, a learning centre could have a number of resource persons with various functions, for example career counselling, technical support or other support functions.
- D) The various learning centres are **locally embedded**. In the pre-project, the mayor administration is the institutional anchorage and thereby indicates that the municipalities themselves administer the learning centres. In other words, a learning centre is a place to study and the municipalities decide how to run the place, and the role of the educational institutions is to offer teaching to the learning centre through different types of couplings. The objective, the design, the resources etc. of the learning centre is thereby solely defined by the municipality.

The criteria are general indicators for the learning centres. The learning centres involved in the project meet the listed criteria in completely different ways and to a larger or smaller extent.

Simultaneously, the working definition constituted the point of departure for an extensive literature review which will be summarised below.

2.2 What does the literature indicate?

Research literature points to a diversity of related concepts whereof one or more (but rarely all) of the four above-mentioned criteria are present. In Danish, it concerns *åbent læringscenter, læringscenter, flexcenter, mediatek, ressourcecenter, fjernundervisning og personligt undervisningsmiljø*. In English research literature the equivalent constitutes concepts, such as *open learning centre, flexible learning centre, library learning centre, resource based learning centre, remote learning, distance learning centre, distance education study centre, self-access centre, learning support centre* and *study hub*.

One of the more well-covered and used concepts across the national borders is *the learning centre* (Buiskool, Grijpstra, Kan, van Lakerfeld & den Oudenhammer 2005; Stang & Hesse, 2006; Hattinger, Hellsten & Snis 2007).

The learning centre is a joint denomination for physical locations where, as a minimum, “some access to some learning in some form” (Clark, 2006). These are central in relation to political demands for educational boosts in a view to strengthening the citizens’ employability as well as their citizenship. Clark’s relatively open definition indicates that the learning centres are a generic description of centres that are able to pursue many different objectives and requirements. The users are often people who need support for basic skills; single parents, minority groups, unemployed, physically impaired people or people of more than 60 years of age, who are not involved in learning activities (Ibid.). Certain centres focus on giving access to learning resources where others have pedagogical support functions as their main purpose. The roles and the educational background of the resource persons employed vary in accordance with these differences. Contrary to the mandatory primary school, the learning centres are based on a voluntariness principle and are thus dependent on the users’ inclination to use the facilities (Diwischek, 2006). Certain centres specialise in self-study packages, others in blends between self-study and class teaching, whilst others exclusively offer class or virtual courses. However, research shows that pedagogical counselling becomes more and more important in these institutions (Stang & Hesse, 2006, p. 5).

Clark presents a way to analyse the many different types of learning centres (2006), where the activities are compared in five key variables. It concerns:

1. Whether the access to the centre is open to all or only to a specific group of people
2. To which extent the learning centre offers learning support
3. The comprehensiveness of educations offered at the learning centre
4. Whether study group work is common or not
5. The extent of the use of technology

From these five variables it is possible to analyse a learning centre and draw up a profile of the type that it represents.

However, Clark’s thinking model does not explicitly consider the fourth criterion, the local embeddedness. This is a pivotal criterion for the definition of learning centres. The local learning centre is, as the name indicates, locally embedded, as opposed to learning centres

located in urban areas (Stang & Hesse, 2006). Various countries in Europe have established local learning centres, specifically in relation to regions with significant educational challenges. In Sweden, it concerns learning centres linked together in the NITUS network, which will be discussed in detail in the following, and in Great Britain, it concerns the so-called *Rural UK online Centres* or *Neighbourhood Learning Centres*, which, at the beginning of the turn of the millennium counted almost 600. Its purpose was to support lifelong learning in the rural areas (The Countryside Agency, 2003). The main idea behind the centres was to ensure that all citizens had access to the Internet and thereby also to the learning resources that it has to offer (such as Learndirect²).

Among other things, the identified success factors of the body's own evaluation point to:

- a wide variety and differences in the supply of educations
- tailor-made solutions for the regional citizens' requirements
- construction of ownership in the local environment
- willingness to continuous evaluation and change of the centres' objectives and purpose
- the ability to top-up the employees' dedication and creativity (The Countryside Agency, 2003).

In other words, the body found that the local embeddedness, the ownership and the initial and continuous adaption to the citizens' requirements were pivotal to the construction of a successful study place of this type.

2.3 A learning centre model 3M

An alternative to Clark's parameters is three general function principles which characterise learning centres in Sweden and which were described in 2001 (Grepperud & Thomsen, 2001). The three characteristics/functions are "meeting place", "mediator" and "motor", also denominated the 3M function. The three Ms are important, as they each point to functions which initiation is pivotal. The learning centre must be placed strategic-organisational among other organisations in order to receive funding and establish collaboration agreements. Simultaneously, connections must be established (mediation is necessary) between the various interested parties' requirements, so that the local manpower can be trained to have the right competencies. Finally, a centre must be established as an accepted and well-known context in which the citizens can meet and which they are going to use.

2.3.1 The meeting place function

A Swedish learning centre is embedded in a locality – a physical place in the municipality that owns the learning centre. The learning centre as a "meeting place" (in Swedish: Mötesplats) includes both the physical and the virtual space. In these spaces (physical as virtual), the student meets other students, his/her teachers and a series of other support and resource persons. The teachers meet the students, however basically only in the virtual space, e.g. through a video conference. Many municipalities integrate multiple functions in the learning centre and aim at shared student rooms and private or public, municipal work places.

² See <http://www.learndirect.com/>

The learning centre as a meeting place has a series of common features with “satellite educations”, as it’s called in Denmark. A physical place where students can meet fellow students and gain access to education is a common feature within the two concepts, but the decisive difference is that the Swedish learning centres are owned by a municipality and not by an educational institution, which is why it’s for the municipality to decide which educations can be offered in the learning centre, in the same way that it is for the municipality and not the educational institution to decide if there should still be a locally embedded “meeting place” for the students.

2.3.2 The mediation function

The “mediation” function of the learning centre (in Swedish: Mäklere) is what makes the learning centre a unique and different access to education. In general, the function comprises acting as a mediator between existing competencies and educational requirements. This task is performed in very different ways in the Swedish learning centres. Where certain learning centres, very much like libraries, only has a passive mediation role in the shape of information on educations (in rare cases also in the shape of presentations or information meetings), the Swedish centres are active in other ways. These centres map the need for skilled labour in the municipality (and in the surrounding area) in which the learning centre is located. This mapping takes place in collaboration with regional competence councils, the adult education units of the municipality, adult education organisations, general education federations, university colleges, other education suppliers and not least through direct contact and collaboration with public and municipal companies in the municipality. The learning centre’s supply of educations and the number of study places offered, subsequently take their point of departure in these locally defined social requirements for skilled labour. Simultaneously, the learning centre undertakes the task to match students residing in the municipality (or in the surrounding area) to the education requirements identified in private and public companies in the municipality. This is realised through canvassing where the learning centre can stress that they are able to channel an education requirement to the direction which is most likely to result in a subsequent job and that even in the students’ local area. The learning centre thus becomes a “mediator” between labour market requirements in relation to manpower, the students educational requirements and the various suppliers of specific educations.

It must be emphasised that the learning centre only takes on the mediator role. The admission to a specific study programme is performed by the actual education supplier which follows standard admission rules. However, a part of the mediator role is that the learning centre may advertise local study places, as a number of learning centres have a local study programme number in the Swedish admission system (similar to the Danish KOT (Coordinated Enrolment System), which indicates that a person can get a study place embedded in a specific learning centre. The mediator function cannot be compared to an employment service. The central function of an employment service is the attempt to find work for a specific job-seeker. The mediator function is about matching requirements. The mediator identifies a future job possibility, which can be obtained via a study place, and with the learning centre, tries to provide the best possible conditions for a match with a group of potential students.

The mediator role is thus first and foremost about the demands of the companies and the citizens. Education is a tool for local growth. It does not mean that learning centres are not interested in the individual citizen, but it is directly communicated that the offers of the learning centres are not for the sake of the students, but is established to safeguard the local

society's requirements for skilled labour. It's cleverly communicated as a joint benefit and concern with the motto 'du behövs' (in English, "you are needed").

2.3.3 The motor function

The strategic reason for establishing learning centres in a number of Swedish municipalities is their contribution to the local and regional growth and development in the municipality. A number of learning centres have also been established for strategic reasons in order to counter migration tendencies, reductions in educational levels and shutting down private or public work places in the municipality. The vision of establishing local learning centres is for them to be an organisational unit which can operate as a driver or motor for local development. The learning centre therefore collaborates with educational suppliers, libraries, employment services and unemployment benefit offices and participates in network collaborations with a number of other local actors in order to establish common visions, objectives and strategies for the establishment of an infrastructure that can support the competence development of adults. This driving innovator function is characteristic for the learning centres and they are also often managed by charismatic persons³, who can personalise the motor function of the learning centre in the day-to-day collaboration with a range of local, regional and national actors.

The motor metaphor relates to (at least) four different functions. The first is about the studies themselves where the activities of the centre can create a local awareness which can result in a sort of "ripples' effect". When the citizens of the municipality see that their friends, parents and the like are commencing their educations, it may be motivational. Secondly, the learning centre can function as a motor for the growth of the business community. Support for competence requirement mapping and the potential meetings at the centre itself may stimulate a creative environment which can help improve production processes and products. The potentially higher level of education that a local learning centre can generate makes it equally easier for companies to recruit skilled personnel. In certain contexts, the direct correlation between the companies' requirements and the courses that the learning centre offers can help in relation to solving specific challenges best through a close co-operation between the work place and the educational institution. However, it's worth mentioning that the cultural differences which, after all, still exist between two organisations of this type may challenge the collaboration. Lastly, a motor function may also be viewed in a political-strategic context. Here, the learning centre is regarded as a development arena in which strategic research as a result of the idea exchanging meetings of politicians and the business community can be initiated and where visions in relation to a local area can be formulated and communicated. Finally, there is the impetus from the local manpower that, through education, fulfils the local business community's demand for skilled labour and thus generates economic growth and ensures settlement in the municipality.

The three functions – meeting place, mediator and motor – give a true and fair view of the most significant functions of a Swedish learning centre. However, there is an overlap between the three function descriptions, and Sweden also pays attention to the fact that the pedagogical organisation of the study environment at the learning centre is not intercepted by these three concepts. The meeting place metaphor is too vague to actually say anything about e.g. how to organise an educational environment in which teacher and students are at two different physical locations, and the two other functions do not focus directly on how to organise high-quality teaching with take-off in a learning centre, either. However, there are examples of Swedish learning centres which use the "motor function" as a point of departure for discussions with local companies on developing new learning methods that break with

³ For more information on this type of actors (drivers), see Hattinger, Hellsten and Snis (2007) and their "actor model".

traditional “school” thinking. For example by developing company-based study courses in which parts of the educational course are transferred to a specific company. Looking across the Swedish experiences in using the 3M function as an indicator for the work of the learning centre, it is obvious that, in general, a fourth function which could act as a driver for and quality assurance of the pedagogical design of the learning centres, is missing. Going over the quality criteria that the national network for learning centres in Sweden (NITUS) has listed, it is striking that not one of them includes the pedagogical aspect (see the section on quality criteria).

The precise implementation of the 3M functions is only poorly described. However, the model below (figure 1) which was developed during the project, outlines the way in which a learning centre can be conceived and which prerequisites and functions that must be present in order for a learning centre to succeed (Petersen, Hestbech & Gundersen, 2016). The three concepts (motor, mediator and meeting place) are realised in three activities (couplings, counselling and mapping) which do not correspond directly to the concepts, but are rather considered to be operationalisations of them.

The right part of the model, indicated by the headlines “mapping/private and public companies” points to the municipality’s need to map its local labour market demands. It is essential that the activities of the learning centre are based on identified and verified demands of public and private companies in the local area and in the region. Especially in relation to the motor function, the identification of demands is important. If educational investments are to act as a motor for a region, they must be coupled directly with the companies’ demands for skilled labour. Only by meeting this demand, these investments can generate a profit in the shape of employment growth, increased production, less unemployment and increased settlement. The left side of the model “Coupling/Higher educational institutions” indicates the importance of a close dialogue with various educational institutions. The learning centre’s possibilities to offer targeted education to the citizens of the municipality depend on contractually protected agreements with educations. On one hand, these must accommodate the demands of the educations in order to be able to plan and organise their admissions and on the other hand, they must fit the municipalities’ demands for flexibility in relation to their supply. An important hurdle is the number of places on which it is necessary to agree in order to balance economy with flexibility. Finally, the middle activity “guidance/Citizens” concerns the importance of the citizens becoming able and motivated to making informed choices on their possibilities for education. The learning centre is not based on supplying a generic selection of educations, but instead attempts to create a connection between the demands of the local companies for labour force and the citizens’ need for a job. When these two demands meet, it is the learning centre’s job to provide guidance in relation to the choice, to support the completion and facilitate as many aspects of the educational demand as possible that do not concern the academic and pedagogical content.



Figure 1 *Municipal learning centres from function metaphors to action (translated from Petersen, Hestbech & Gundersen, 2016).*

Clark's model, the 3M functions and the model above (figure 1) were used in the attempt to conceptualise and understand the Nordic Study Labs project's visit with the participating countries' learning centres. Especially couplings, mapping and counselling were used as general analysis tools in relation to the case descriptions. However, it is not necessarily clear from the case descriptions as to when the concepts were used. This is partly due to the fact that the visits and the analysis were time-delayed, partly because a number of the highlighted points turned out to be emerging factors and not necessarily observable in relation to the individual case. Furthermore, the case descriptions are meant as a tool for the support for and scaffolding of design and redesign of municipal learning centres for the partners of the participating countries.

3.0 Nordic experience with learning centres

In the following, a series of experiences from study visits to the participating partners' countries is presented. It must be emphasised that the descriptions are abstracts of the activities of the respective study visits, which is why activities and actors are not included. As previously mentioned, each description therefore constitutes a case. The descriptions are structured according to the same, simple patterns. First, a contextualisation of the experience is presented. Next, an extract of the presented formats and visits will be reviewed and finally, a series of more general experiences will be summarised.

3.1 Swedish experiences

Contextualisation

The first Swedish learning centres were established in the beginning of the 1990s where a number of municipalities began offering training directed at the welfare professions by using their own means. In 2003, more than 248 Swedish municipalities established a learning centre with a total of 42,600 students, and in 1996, 30-40 municipalities established a joint interest organisation for the municipal learning centres, called "Nitus", which approximately 10 years ago drew up a series of quality criteria, which the Swedish learning centres use continuously in their quality assurance work.

The Swedish learning centres contribute to adult continuing education with a point of departure in a demand perspective on skilled labour in the local society. The learning centres are organisational units with specific functions, and they are a part of a major educational infrastructure. In this context, the "learning centre" concept refers to both "space", "organisation" and "infrastructure for education" and thus signals access to education in the shape of the establishment of virtual/net-based learning environments. However, the Swedish learning centres are established in many different ways, and each municipality's choice of functions in the learning centre determines the way in which a specific learning centre is included in the regional infrastructure attached to education and labour market. Sweden has followed the learning centres through continuous follow-up research. In 2002, the characterisation of a typical learning centre student and whether the students would have completed an education had the learning centre not existed, was researched. The result of the analysis shows that the typical student is a 32-year-old woman with two children. Due to everyday obligations, this type of student would not have completed an education, had the learning centres not existed.

On the 24th and 25th of August 2015, the Nordplus project group visited the learning centre Campus Västervik in Sweden. The learning centre is located in the shipping city of Västervik, which is situated in the northernmost part of Småland and has a population of approximately 21,000. Västervik municipality is a part of Kalmar Län which, during the last few years, has been among the areas in Sweden which has been seriously afflicted by migration. The business community in the area mainly consists of manufacturing industries, small-sized companies and forestry. Furthermore, Västervik has a major hospital which is the largest public work place in the municipality. Every year, a lot of tourists visit the city, but, simultaneously, the city is fighting the tale that one has to move to a bigger city to amount to something. The closest major educational institutions are all between 100 and 450 kilometres away, and therefore the municipal strategy is to offer educations directed towards the demands of the business community through a local learning centre, Campus Västervik, which are linked to educational institutions elsewhere in the country.

Presented formats and visits

The Campus Västervik learning centre, which is quality approved by the interest organisation Nitus, was established in 1996 and has since grown steadily in relation to the number of students and educations⁴. Today, the learning centre has approximately 500 students, and an extension of the physical facilities is initiated, making room for approximately 800 students. Campus Västervik operates as a physical study place where students can meet fellow students, teachers, mentors and other resource persons and gain access to a series of educations offered in collaboration with Högskolan Väst, the Karlstad University, Linköping University and Linné University.

⁴ Read more about Campus Västervik på <http://www.vastervik.se/Campus-Vastervik/>.

The universities and the university colleges manage the teaching which is executed as parallel teaching where the students are present in person at Campus Västervik and through video conference equipment are linked to students and teachers present at the locations of the university. In 2016, 8 different educations, corresponding to 180 ECTS, and 3 educations corresponding to 60 ECTS are offered. The supply of educations is closely matched with the local demands for manpower and it is estimated that 96 out of 100 students go directly to the labour market after the completion of their education. In 2016, Campus Västervik's supply of educations comprises the following educations: Nurse, special nurse, special needs worker, master degree in child and adolescent science, master degree in social work, co-operative economy, co-operative electric energy, co-operative product development and design, co-operative production engineering and logistics, co-operative industrial economy, co-operative system development and IT and society. Furthermore, in 2016, as a new feature, Campus Västervik offers three different educations (production technician, currency specialist and dairy technician) in collaboration with Erhvervsakademi (Business Academy) Lernia. Furthermore, Campus Västervik participated in a 6-year-long village development project called "Campus in Småland", where the learning centres in the neighbouring municipalities, Hultsfred, Vimmerby and Västervik (together "Campus Småland") within a 10-year-long period of time must ensure the training of 4,000 citizens for available jobs in the region within the welfare sector and the private business community.

Experiences

In the following, a series of central experiences from Campus Västervik, which relate especially to the teaching strategy of the learning centre and its function as a "mediator" between local requirements for labour, the students' requirements for education and the various suppliers of specific educations, is presented.

An important experience from Campus Västervik can be seen in the learning centre's approach to education, where the supply of educations is closely matched with the local requirements for skilled labour. Thus, Campus Västervik maps the need for skilled labour in the municipality in collaboration with the regional competency council, the municipalities' adult education units, adult education organisations, general education federations, university colleges, other suppliers of education and not least through direct contact and collaboration with the public and municipal companies, located in the municipality. Subsequently, the learning centre's supply of educations and the number of study places offered takes its point of departure in these locally defined societal needs for skilled labour. Simultaneously, Campus Västervik undertakes the task to match students who are residing in the municipality (or in the neighbouring areas) with the education requirements identified at private and public companies in the municipality. This is executed through canvassing where the learning centre emphasises that they can channel a request for education to a direction that will most likely result in a subsequent job, and that even in the students' local area. The learning centre thus becomes a "mediator" between local demands for labour, the students' requirements for education and the various suppliers of specific educations. Especially interesting in this context is the fact that Campus Västervik, as an institution, is placed between three different systems or types of institutions, i.e. the political system (the municipality), the municipal and public companies (in the local area) and a traditional education system represented by one or more educational institutions. This placement means that Campus Västervik in its interpretation of the mediator function targets its work towards mediating, connecting or coupling these different systems. They do that by using various strategies, whereof double allocation of employees with functions in the learning centre as well as in the adjoining systems and institutions turned out to be a very efficient strategy.

Double allocated employees are people who are employed at the learning centre, but who also work outside the learning centre in functions related to either the political system, companies or educational institutions. These employees contribute to the agility of the learning centre in relation to navigating in various system codes. The learning centre is observed by a company code as well as a political code and an education system code. In order to succeed, it must surpass the various systems or try to connect or couple these different contexts. The function of the double allocated employees is to communicate internally in the system (at one place or the other) the rationality of the other systems' observation of the learning centre. With these strategic employments, the learning centre has a mediator function between companies (recruiter), the municipality (owner) and the educational institutions (producing partner), which is visualised by the model below:

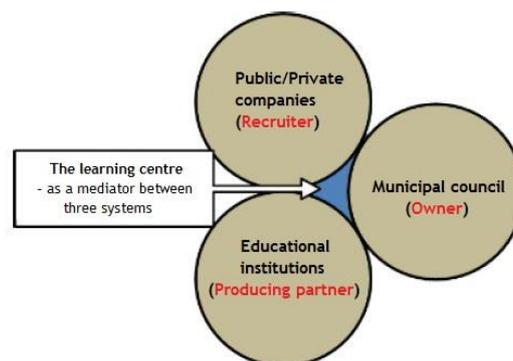


Figure 2 *The learning centre as a mediator*

An example of such a coupling person is the career counsellor of the learning centre. She works in a cross-field between (at least) two codes: the political and the educational. She is physically located on campus and refers directly to the head of campus. Thereby, she is in close contact with the learning centre and the existing educational possibilities. Simultaneously, she works for the municipality, which means that her area includes all the municipal citizens who need career counselling. Several people in her target group are referred to her from the job centre and are guided on to short-term vocational training which the campus does not offer. The biggest challenge in relation to career counselling is to get in contact the citizens. Contrary to the study and career counsellors at the educational institutions and for example the integration employees at the municipality, she is dependent on having the citizens referred to her. Even among the counsellors at the upper secondary school, the campus neighbour, she experiences a tendency to be neglected as a counselling possibility. She therefore spends a lot of her time keeping in touch with the counsellors in the municipality and gives presentations in relevant places. Other examples of double functions at Campus Västervik include a teacher who is employed both at Campus Västervik and at the university college in Trolhättan and a person who is employed at Campus Västervik and at the same time works for the municipal council in Västervik.

In the above, we have seen how Campus Västervik, through the mediator function, works consciously and targeted at mediating between and coupling three different systems or types of institutions, i.e. the municipality, municipal and public companies and a number of educational institutions. However, one of the biggest challenges for Campus Västervik lies in fact in this mediator task, as Campus Västervik and other Swedish learning centres experience that it is especially hard to motivate the educational institutions to enter into a collaboration in which their educations are offered through a learning centre. Among other things, this is due to the fact that the Swedish educational institutions are not really obligated to offering education through the learning centres and that the universities and university colleges thus do not have the incentive to collaborate with the learning centres. Furthermore, Campus Västervik experiences that negotiations with the educational institutions are slow and that the tradition-bound institutions have difficulties in relation to accommodating the demands of the learning centre for speed, flexibility and continuous development of new educational provisions. For a long period of time, Campus Västervik has prioritised motivating and building partnerships with relevant educational institutions, and on a national level to include the state in order to get the educational institutions to be more flexible in relation to the collaboration with the learning centres.

Yet another experience from Campus Västervik concerns the teaching strategy which is reflected in the teaching at the learning centre. The teaching is primarily executed as parallel teaching through video conference equipment, where students and mentors meet in person on campus and communicate synchronically with their teacher and fellow students at one or more other educational institutions. One can thus say that the didactic setup for the parallel teaching is attempting to imitate traditional classroom teaching with the support of video conference technology as the primary means of communication between teachers and students. The collected empirical data from the visit at Campus Västervik show that the students are completely satisfied with the teaching they are offered at the learning centre, and that it is of great importance to them that they do not have to spend a lot of time commuting in connection with their studies. The completion percentage for students enrolled at Campus Västervik is constant and approximately 95 %. Campus Västervik considers development of the parallel teaching didactics as important, but also recognises that it has not been a priority. In other words, there is a huge potential for innovation of the teaching strategy in the shape of the didactic design of the learning centre, as the planning and execution of the coupling between the learning centre and the educational institution can be advantageously re-thought with a point of departure in the latest knowledge on didactic theory.

3.2 Icelandic experiences (Käflavik)

Contextualisation

From the 21th to the 24th of October 2015 the Nordplus project participants visited a number of educational institutions in Käflavik and the neighbouring areas. Käflavik is an Icelandic city with approximately 10,000 inhabitants and is located in the Reykjanes region in

the southwestern part of Iceland. Together with Njarðvík and Hafnir, Káflavík constitutes the municipality of Reykjanesbær⁵, which has 13,256 inhabitants. Iceland is a country that has relatively sparsely populated areas. If everybody on Iceland is to have the possibility of accessing education, the educations must be offered in a flexible way. The educational institutions have solved this in various ways.

Presented formats and visits

We visited a number of educational institutions on Iceland: Miðstöð símenntunar á Suðurnesjum (MSS), Fisktækniskólinn, Háskólabrú Keilir, Keilir Aviation Academy. They offered many different kinds of educations and were very differently organised.

The first visit was at Miðstöð símenntunar á Suðurnesjumcenter for lifelong learning (MSS), which is a centre that was established in 1997. In relation to the Study Lab project, MSS is interesting, because, here, it was possible to gather completely different students and educations and build a study environment. The construction of a study environment is pivotal in relation to constructing and maintaining a study lab. The educational institution offers very different types of educations and they have established a series of facilitating functions to support the many different ranges. The purpose of MSS is to offer courses and educations to students and companies.

For example, the following are offered: Icelandic language courses for immigrants, foreign languages, business courses for health care and social workers and courses for employees in the tourism industry. In addition to this, MSS offers learning facilities for university students in the area and facilities and equipment for distance teaching. The students are often there in person and receive on site teaching. MSS is a part of a major organisation of educational institutions on Iceland. A total of 10 main centres and 34 sub centres are included in the collaboration. A good educational environment is not an unambiguous factor (Misfeldt & Holst 2010). MSS created an educational environment situated together with a retail environment. They succeed in creating a space with room enough for both students and teachers and where classroom teaching, independent distance studies and study groups can gather to study.

The other three visits were at the educational institutions Fisktækniskólinn (the fishery school),

Háskólabrú Keilir (university college Keilir), and Keilir Aviation Academy.

These institutions are not very interesting to the Study Lab project, because they are all successfully using flipped learning. Flipped learning is a form of teaching that 'flips the traditional learning environment' by delivering instructions and content, often online, outside the classroom. In the classroom, there is more counselling and facilitation than teacher presentations. It is also denominated a 'laterally reversed classroom', as there is a re-distribution in relation to what was defined as homework and what was defined as teaching. Flipped learning is a part of the concept blended learning (Bergmann & Sams 2014A, Bergmann & Sams 2014B, Hachmann & Holmboe 2014).

Today, blended learning is a well-known concept within teaching, but there are different perceptions of the words. We would like to define blended learning as teaching that "integrates net-based teaching with presence teaching in a planned, pedagogical, profitable

⁵ <https://da.wikipedia.org/w/index.php?title=Reykjanesb%C3%A6r&action=edit&redlink=1>

way which is not only combining, but which also profits pedagogically by integrating presence teaching with net-based activities and vice versa” (Vignare 2007, Frederiksen et. al 2013). Analyses show that blended learning can promote the pedagogical quality (Garrison 2012, Nazarenko 2015), and that flipped learning supports learning (Thompson & Martin, 2016). This was also the experience at the Icelandic educational institutions. It’s the experience of the university college in Keilir (HK) that flipped classroom entails:

- Higher grades
- Fewer behavioural problems
- More satisfied students, teachers and parents
- More independent students

HK is an educational institution that describes itself as the Bridge to the university. They offer admission courses to the universities. They offer four lines of study: social sciences and law, humanities, business administration and economy, engineering and natural sciences. They collaborate with the University of Iceland on the supply of educations. It takes two years to complete the education.

A total of 227 students are enrolled in the education, 125 receive distance teaching (e-learning) and there are 102 local students.

The male/female ration is 30 % men and 70 % women in the education. The education has an average age of 32 years and a drop-out rate of 30 %.

The educational institution offers all lines of study as flipped classroom.

In addition, the school refers to the video below which they describe as a part of the reason for choosing flipped classroom: <https://www.youtube.com/watch?v=7seuXKZNdp0>

The aviation organisation Keilir Aviation Academy also uses flipped learning in their courses. They offer the following programmes and courses: Integrated Professional Pilot Programme, Private Pilot Licence, Vocational Pilot Certificate, Instrument Rating, License Converting, Flight Instructor Assessment, Cabin Crew Training Course, Aircraft Engineer Programme, Air Traffic Control Course and Flight Dispatcher Course.

Not all parts of the programmes are offered as flipped classroom, but parts of them are online. For example, the students watch a series of high-quality videos followed by a number of self-evaluation tests. The students are organised in groups that collaborate on assignments and receive counselling by an experienced instructor.

The fact that parts of the course are online has meant that major parts of the programme can be done via self-studying and has thus made it more flexible for students who do not live nearby.

Also the fishery school, Fisktækniskólinn, offers educations via flipped learning. The school began offering educations in 2011. The target group is first and foremost persons who are already in the fishing industry. The education emerged because of increased demands for the fishermen and the industry, where being a fisherman and being in the fishing industry require a higher level of knowledge and technical skills than before. Many of the education’s students are already employed in the industry, and the school thus describes them as a little older. Currently, there are 100 students. There are approximately 15 students per class. Currently, the fishery school is private, but it also manages public funds. The students come from all over Iceland and that complicates face-to-face (synchronous) teaching. Simultaneously, the students work at different times, so teaching all students at the same time is also complicated, which is why the education uses both synchronous and asynchronous technologies.

The education consists of 50 % of theory and 50 % of practice and is completed in one year. In addition, the institution offers short courses. A part of the students study online while they are at work, i.e. on the boat or at the factory. They fit it into the work day in order for them to study outside peak production or fishing periods. Most of them will subsequently get a job after completing the education or keep their jobs.

Before the students begin studying they must take a course in online learning. The teachers describe the course like this: "They must learn to learn through a computer". The educations have no books; everything is online.

The teachers feel that it is important to be in close contact with a student, when a large part of the education is performed online. It is time-consuming, but they believe that it produces great results.

Experiences

The educational institutions that we visited were positive in relation to the use of and the profit from flipped learning. First and foremost, they had the following reasons to offer educations via flipped learning:

1. Geographical considerations. The students can do most of their studying at home or in the neighbouring areas.
2. Flexibility. It is easier to combine education and work life, if the education is flexible
3. Increased learning output. Own and other's analyses show that it can increase the students' learning in relation to mere traditional teaching

As can be seen from the descriptions of the educational institutions visited, the educations on Iceland are very flexible, i.e. the students do not necessarily need to spend all of their study period at the educational institution and many of the learning resources can be accessed whenever it suits the students. However, none of the above-mentioned places can be designated as learning centres, but they all have elements of a learning centre. Miðstöð símenntunar á Suðurnesjum (MSS) has a lot of the elements, because they offer learning facilities and technical equipment for university students enrolled at another educational institution. Simultaneously, this educational institution offers many educations under the same roof and has a high degree of local embeddedness in their collaboration with local companies and institutions. The other institutions worked with Flipped learning. Fisktækniskólinn (the fishery school) was able to see how to successfully teach persons online who had been outside the academic world for several years, which, from a participant perspective on learning centres, is interesting. The two educational institutions in Keilir showed us how flipped learning could contribute to a higher academic level and how it could help the ones who were living or working far from the educational institution.

3.3 Norwegian experiences (Lillehammer)

Contextualisation

From the 7th to the 8th of December 2015, the Nordplus project participants visited Lillehammer.

Lillehammer is a Norwegian city – and a municipality with approximately 25,000 inhabitants which is located in the Guldbrandsdalen in the eastern part of Central Norway. Norway is 9 times bigger than Denmark, but has approximately half a million fewer inhabitants, which is why there are so many sparsely populated areas.

Therefore, Norway needs flexible solutions to educational challenges.

Presented formats and visits

We visited Høgskolen in Lillehammer/University College Lillehammer, and learned about teaching through campus NOOA <http://www.nooa.no/nettstudier/>.

In Norway, a lot of educational institutions work with various forms of e-learning. Locally in Lillehammer, e-learning education especially emerged in connection with Lillehammer being the host of the Winter Olympics in 1994, as many buildings had to be used for the Olympics, and thus, there were not enough buildings left for education. In connection with the Winter Olympics, the Høgskolen used video cassettes which were sent to the students. Thus, the foundation for e-learning was established, and Høgskolen then began making websites, and later on, the Senter for Livslang Læring (SELL) (Center for Lifelong Learning) was established.

Furthermore, the university is built on educations within tourism, experience economy and television and film. However, the Senter for Livslang Læring does not collaborate with these departments. There is both the film education and the Norwegian television education, but this does not rub off on the rest of Høgskolen – it could be an occasion for integrating media in the rest of the teaching, but they are described as being relatively isolated.

SELL was established in 1990 and is a self-financed unit with 20 full-time employees. It is currently analysed what would be beneficial to offer and then the environment will be constructed. For example, many courses for teachers are offered because of a new, Norwegian school structure. There are 200 schools with more than 6000 teachers, and the aim is a completion percentage of 80 %. SELL uses many resources on servicing the students. It is important that the educations are working for the students, as they often have families and jobs in addition to their studies. Therefore, they should only need to spend their resources on the most important things.

Each field of teaching has its own project coordinator and these coordinators are in close contact with both the field and the students. For example, a teacher was hired to keep in contact with the schools and the teachers, and a person within the travel industry to keep in contact with the travel industry and the persons participating in the tourism courses. The motto is: If there is no project management, the students will drop out. 61 % complete the first and foremost asynchronous online education within the standard time limit. The department was originally based on educational theory and practice, psychology and didactics, but it now has a wider aim. In 2000, SELL had 1,200 students, today, the number is 5,000. There are 6,500 MOOC students in addition to the other students. Asynchronous technologies are used for teaching because of the flexibility and because those are the technologies with which the department has experience at this point in time. However, there is also a PhD programme and a master programme.

We also 'visited' Campus NooA (Nordic open online Academy) which is an online campus. This year, there are 1,500 registered users from 25 countries. Campus NooA has been accredited by the Utdannings og forskningsdepartementet (Education and research office) in Norway according to the law on adult training. NooA's objective is to become an internationally recognised centre which:

1. is an attractive partner to teachers and organisations that want to produce and communicate asynchronous courses.
2. gives the participants a great amount of flexibility and learning.
3. is accredited in several countries.
4. has students from many countries.
5. supplies courses in different languages, first in: English, German, Portuguese, Spanish, French, Norwegian, Swedish and Danish.
6. is among the largest suppliers of asynchronous courses in the Nordic countries.

There is a tuition fee for the participation in Campus NooA's courses. Campus NooA offers free courses on being a net student for all enrolled students. A large number of courses are offered. Currently, more than 80 different courses were offered, and an extension of the supply is requested. At Campus NooA you can study: writing, management and tourism. Campus NooA uses the platform called Moodle, which is why we heard about the function and construction of the Moodle platform during our stay in Lillehammer. Campus NooA especially contributed to the project by showing us and telling us about the didactic advantages and disadvantages in relation to asynchronous online teaching and by illustrating what the flexibility means to the students.

Experiences

The asynchronous teaching is characterised by the students deciding time, place and speed themselves. In Norway, the asynchronous teaching dates back to the previous distance teaching which first and foremost took place in the shape of correspondence courses, later through video tapes (as depicted in the above), and lastly, through online technologies. It is obvious that Norway has been working for many years with asynchronous teaching. This can be seen e.g. from the establishment of a professional production team at Høgskolen, and from the fact that teaching is offered and accredited by the established educational system.

The latest addition to asynchronous teaching is MOOC (Massive, Open, Online Courses). MOOC first emerged in the USA as a course offered at the University of Manitoba in 2008. The novelty of MOOC is that, in principle, an almost infinite number of students are able to participate in the course (Hatzipanagos, 2015), and the teaching is free of charge. Høgskolen in Lillehammer also successfully offers MOOC, and regards it as a supplement to the other courses that they offer. This illustrates that there is a demand among the students for many different types of asynchronous teaching.

3.4 Experiences from the Faroe Islands (Suðuroy)

Contextualisation

From the 24th of February to the 25th of February 2016, the Nordplus Study Labs group visited the Faroe Islands, where study visits to Thorshavn College, which is the largest educational institution of the Faroe Islands with 250 employees and more than 1,500 students, were conducted. The educational institution consists of three merged upper secondary schools, which, besides upper secondary education, also offers a Graduate Diploma Programme (continuing education within business administration). Students can choose to study the Graduate Diploma Programme by moving to Denmark to follow the teaching in Danish in a Danish educational institution, but they also have the possibility of staying on the Faroe Islands and study the same programme through synchronous and asynchronous distance teaching.

The Nordplus Study Labs group also visited the Fjernundervisningscenter Fjarlestrardepilin (distance teaching centre), which is the pivotal point for this section, as the educational institution operates as a learning centre, and the majority of the teaching is executed through synchronous and asynchronous couplings to educational institutions.

Fjernundervisningscenter Fjarlestrardepilin is located in Vágur on Suðuroy, the southernmost island on the Faroe Islands. There are approximately 4,500 inhabitants on Suðuroy, whereof approximately 1,360 live in Vágur. In Vágur, there is a harbour with a shipyard and several fish factories, and the city also accommodates a medical clinic, a small hotel, a bank and a number of shops. 100 years ago, Suðuroy was the place where wealthy Faroese lived, but the population has drastically decreased since 1920, and today, the area is marked by unemployment, especially in seasons where the fishing industry shuts down, and many work places are now discontinued.

As a consequence of this development, many citizens, especially the young generation, moved away from the island and fewer babies are born on Suðuroy.

It is possible to study a social and health care assistant programme and internships are offered in the banks and in the fishing industry. All other educations must be taken elsewhere on the Faroe Islands or abroad. In order to accommodate the objective of the Faroe Islands that “everybody has a right to an education”, a learning centre was established in Vágur, Fjernundervisningscenter Fjarlestrardepilin, which, through synchronous and asynchronous couplings, gives the island citizens the possibility of completing a course or an education, offered by educational institutions elsewhere on the Faroe Islands or abroad.

Presented formats and visits

Fjernundervisningscenter Fjarlestrardepilin is an offer for the citizens of Suðuroy who wants an education, whether it is a higher education, a supplementary education or another qualifying education.

The learning centre opened in April 2013 with the objective to attract at least one student during the first year, and a total of 4 students ended up completing a study course. Today, a total of 15 students have completed an education through the learning centre, and approximately 800 students have followed short or long term study courses at the learning centre.

The target group of the centre comprises students who want to complete a higher education, get additional education (for example an additional master degree) or a new and better education due to e.g. illness or unemployment. The students who follow a course at the learning centre receive a grant from the government and the Danish State Education Grant

(SU), if the education is entitled to receiving the grant. The Faroese have the same right to education and financial support as other Nordic citizens.

The learning centre collaborates with educational institutions on the Faroe Islands on offering higher education, but seeing as the educational supply is fairly limited on the Faroe Islands, the learning centre prioritises the establishment of collaborations with educational institutions in other countries, such as Denmark, Norway, Sweden and Great Britain. Most educations offered through the learning centre are from the exact same countries as mentioned above.

The learning centre is constantly on the look-out for new, relevant educations which are already offered online in other countries, but there is no systematic approach to the disclosure of local labour market requirements for competency development. The learning centre takes its point of departure in the individual citizen's requirements for education and tries to establish collaborations with educational institutions which offer online education and courses that match the citizens' requirements and needs.

Furthermore, the learning centre offer study counselling for the students of the learning centre and potential applicants are guided in relation to educational possibilities, application procedures, student economy etc. Applicants who want an education offered by an educational institution abroad must apply for admission through the application system used in the respective country (e.g. the KOT system in Denmark).

Fjernundervisningscenter Fjarlestrardepilin is located in a building with facilities for both synchronous classroom teaching and group work, and they focus on the students feeling that they are a part of the study environment. The teaching that takes place in the learning centre, is typically synchronous through a video call to an educational institution through an iPad and on the online learning platforms that the educational institutions use. The setup entails that one or more of the students in Fjarlestrardepilin (and possibly from other locations on the Faroe Islands) are digitally connected to a teacher who is situated elsewhere on the Faroe Islands or abroad. In connection with the individual educations, a teacher is present in person at the learning centre, e.g. at the social educator programme, where, in February 2016, for the first time in the history of the centre, a class of 21 students from various locations on the Faroe Islands, started. This class receives parallel teaching once a week and every fifth weekend, and a teacher is there in person regularly in connection with teaching and counselling.

Experiences

As described above, Fjernundervisningscenter Fjarlestrardepilin focuses on directing their supply of educations to the individual citizen's requirements. This way, the learning centre operates as a successful mediator between the individual citizen and the relevant educational institutions. Fjernundervisningscenter Fjarlestrardepilin does not act as a mediator between private and public companies, citizens and educational institutions, like we have seen elsewhere, but they recognise the potential of mapping local labour market requirements and establishing collaborations with educational institutions that match these specific requirements.

Vágur is especially good at creating a contact and giving counselling to citizens, such as students at the learning centre as well as potential applicants, and the success of the centre can partly be ascribed to a management with strong competencies in relation to creating contact to and collaborating with educational institutions abroad.

Furthermore, it should be mentioned that behind the establishment of the learning centre is a very strong and dedicated local community, and several of the centre's employees are volunteers who want to contribute to the further development of Fjernundervisningscenter Fjarlestrardepilin.

3.5 Greenlandic experiences (Sisimiut)

Contextualisation

From the 19th to the 22nd of April 2016, the Nordplus Study Labs group visited Sisimiut (Holsteinsborg), Greenland. The city is the second largest in Greenland with a population of 5,460. Given the enormous land area that Greenland covers, it is not surprising that Greenland has the lowest population density (56,370 inhabitants) in the world. The distance between cities and villages is large.

Transport (by air, sea) between cities and communication (telephone and Internet) are thus to a large extent considerably limited. A very important factor for the understanding of the case is the meaning of the culture in Greenland for the function of the educational system. Greenland constitutes an 'extreme case', both in relation to the infrastructure challenges and in relation to culture as an important factor within educational practice.

Presented formats and visits

The study visit included visits to two educational institutions, Qeqqata Academy and Teknikimikilinniarfik (KTI). In addition to this, we had a video conference with Anders Øgaard, who presented his PhD thesis *Fjernundervisning i skolen i Grønland (Distance teaching in the schools of Greenland)* and an oral presentation by e-learning consultant Barfuss Ruge, who manages the company internettikkut.gl. Common to the presentations and the visits was the story on the importance of Greenland's culture to the practice that unfolds in relation to education, the results that the educational system achieves and the way in which the educations to a high extent succeed in arriving at constructions that are not based on cultural assumptions, but are adjusted to the temper, behaviour and lifestyle of Greenland. A very clear and specific example was the notation of the culture of Greenland as one that appreciates 'the modest competent', i.e. a person who, despite having competencies or knowledge, does not try to assert him or herself and who would rather declare his or her ignorance than promoting him or herself. It is easy to miss such a person in an educational culture that counts on students putting up their hands during classes and are proactive in their work.

The importance of the culture is reflected in large drop-out rates. Many people find that they are actually not ready for an education. For the adolescents as well as for the parents the separation from family is hard. Malene Larsen from Qeqqata Academy, which, among other things, has educations that qualify adults for the leaving examinations of the municipal primary and lower secondary school or for the admission to the vocational training, also recognises this in their target group. Many people do not prioritise examinations in the middle of the day and therefore have to wait for the next exam date; others are not prepared for the effort required in relation to a study course. The language is a highly integrated part of this challenge and it poses a multifaceted challenge. Greenlanders from different areas do not necessarily understand each other. Danish is their second language and English is their third (sometimes third and fourth language because of the Greenlandic dialects), but they are mastered on different levels across the population.

The selection of Greenlandic teaching material is limited, and in some ways it is difficult to find skilled labour capable of completing an education in Greenlandic.

A picture of Greenlanders, who were geographically, closely connected to their home to a point where family is the very first priority, was presented to the study group. This creates challenges in a system with built-in assumptions that students act as individualists in relation to their priorities. An example of the way in which the educational system recognises this, are the vocational training programmes (EUD) and the upper secondary level educations (GUX) offered at Teknikimik ilinniarfik (KTI) in Sisimiut. The head of EUD, Finn Olmestrup, and Lotte Mundus, GUX Sisimiut Coordinator, explains that the school has established their own dormitories in the recognition of the fact that the students do not want to leave their families. The dormitory has room for 350 people, which at present only just meet the demand. Pupils from the age of 15 come from the entire coast (2 cities and 6 villages) to live at the dormitory for up to 3 years. The dormitory gives students with families the possibility of bringing the entire family to a dormitory apartment while the student is participating in e.g. an industrial school programme for 10 weeks as a basic training course. During this period of time, the school assigns school and kindergarten places for the children of the family. A minder is employed to help the young students without a family with daily activities and routines. In addition to this, there are measures to ensure that the students arrive at the school, as the school provides transportation (sledge dog, helicopter, coasting vessel). The dormitory is an example of the way in which the educational institutions in Greenland are working on developing and modernising Danish education formats so that they are adjusted to Greenlandic conditions. Other examples are:

- the students have the possibility to complete an internship with a local employer in their own village or city
- the students have access to a bilingual special-subject teacher
- the students have the possibility to complete tests and exams in Greenlandic with a bilingual censor and an interpreter to assist at the exam
- the students have the right to one home transportation a year free of charge

These initiatives bridge the contexts between which the students themselves would have to prioritise and mediate (e.g. school context and the home). When the contexts are thus coupled, the students are continuously retained in a study activity which would otherwise have been affected by many transitions from one context to another. Another example of the benefits of such couplings is that the students complete the internships. In order to retain the students in a school relevant mind-set and train academic assignments while they are away from the school, the school sends the students coupling assignments which they have to solve by finding the solution at the internship place (e.g. 'what is a dormer cheek?' The dormer cheek must be found and geometry assignments must be solved). A final example of innovative measures is the school's production of a series of short video clips in Greenlandic. The videos surpass the above-mentioned linguistic difficulties and dyslexia, and at the same time make learning possible at places and times where the Internet connections are either not available or very expensive.

In addition to this, the educational institutions have other ways of focusing on mechanisms that scaffold the students in retaining and completing an education. Lotte Mundus explains how the upper secondary school uses a lot of resources on giving counselling to the students. It is an anthropological approach, as the problems that the students experience and their reasons for dropping out have been studied. Simultaneously, the study counsellors are in dialogue with the families. Parents' meetings and conversations through Skype are arranged, in which it is made clear what the school expects and demands from parents and students. A part of the study counselling also concerns managing drop-outs and giving them guidance as to moving on in another direction. The school also puts a lot of effort in the

teachers. New teachers are introduced to the Greenlandic conditions at the 'Newteachercourse' and a course in second language pedagogy. A homework café has been established, which purpose is to make sure that the many written assignments are produced.

In addition to vocational training programmes and upper secondary education, the KTI Campus (Kalaallit Nunaanni Teknikkimiik Illinniarfik/The Technical College of Greenland) also accommodates the natural resource school which educates entrepreneurs for the mining and offshore industries and the arctic engineer diploma programme, ARTEK, which is a collaboration between Greenland and the Technical University of Denmark (DTU) on research, teaching, innovation and public sector consultancy in the technical field. Egil Borchersen, head of studies at ARTEK, explains that the arctic engineer programme is a professional bachelor programme (bachelor for 3.5 years + master for 2 years), arctic semester, part of the master extreme engineering (field work with 2,030 students in August). The programme has the same requirements as a Danish engineer's degree and consists of 8 semesters: 3 semesters in Sisimiut, 2 semesters at DTU Ballerup, Denmark, 1 semester of engineering internship in the Arctic, 2 semesters at DTU or other relevant university and a master thesis on an arctic subject. The programme admits students from Greenland and Denmark as well as from the other parts of the world.

Hans Hinrichsen, education manager at the natural resources' school, explains how the natural resources' school was established as an initiative for educating local, Greenlandic manpower for the mining and offshore industries. The target group is adult Greenlanders, especially from the fishing industry, who want to be re-educated for this industry. At the beginning, the school was assisted by similar schools in Canada and Norway for the establishment of a 'common core' for new miners. They have put a lot of effort in becoming internationally recognised, and thus, the school was certified by Norway among others. The natural resources' school turned out to be a huge success. 1,061 Greenlanders went to the school and gained competencies. An education within natural resources located in an Inuit society has turned out to make the education interesting for all groups with an Inuit background. Thus, the school is planning to establish collaboration agreements, so that students from other countries will come to Sisimiut to study this programme.

Especially the secondary school has come a long way when it comes to the technology related to using online and e-learning teaching, project-based teaching with project management tools and technological teaching aids (iPads, social platforms, E-books and I-books, tools such as trello, asana, edmodo). Exams have been tested (both written and oral) through an online system, and censors grade the assignments online. In relation to ARTEK, the teaching methods primarily consist of well-known formats. They are thus not using a Learning Management System (LMS). A type of distance teaching was tested, video lectures with an HTX (Higher Technical Examination) teacher present to answer questions and provide guidance in relation to assignments and lectures through Skype in direct dialogue between teachers at DTU Lyngby, Denmark, and students in Sisimiut. This year, financial support has been obtained to test and extend the possibilities of distance teaching via the Internet.

Experiences

KTI Campus is a unique expression of a way of thinking education that is characteristic for the persons and other institutions to which the Nordplus project was presented in Greenland. KTI gathers all educations in the same campus environment.

The reasoning is to “enter in the 9th grade and go all the way to a PhD and, in principle, be able to receive counselling in all directions”, as Lotte Mundus expresses it. Thereby, the educational institutions are considerably successful in relation to giving the right counselling to the students, to get to the students who are at risk of falling through the cracks and support the students in completing the educations. 10 % of the population of Sisimiut are enrolled in educations. This, despite the fact that all of the interviewed educations reported high drop-out rates, problems with theoretical subjects and academic learning and, as previously mentioned, difficulties in relation to combining educational requirements with the aspects of the culture in Greenland. A part of the explanation for the success seems to be a considerable extent of goodwill and a high degree of collaboration between the relevant actors. For example, the Center for national Counselling is available to all students in Sisimiut, and the educational institutions regard the municipality as very responsive and co-operative. Another aspect is the focus on specific solutions (e.g.: Is the problem the distance? Then, we will arrange the transport. Is the problem submission of assignments? Then, we will arrange a homework café, so that the assignments are produced, etc.). Thus, the focus is on eliminating practical and logical obstacles, so that the students can focus on their studies. A third aspect is that, obviously, the environment has an ambitious aim and a number of dedicated employees who are enthusiastic about testing new forms and initiatives. An example is the participation in the Nordplus project ‘Biophilia’, which is a collaboration on academic courses with the primary school, the music school and other educational institutions.

The result is that the educational institutions have, without necessarily verbalizing it, established efficient counselling for their students, which supports their way through the educational system. Compared to the challenge of a high drop-out rate, good counselling e.g. means that EUD experiences a ‘negative drop-out rate’ on certain year groups, in other words classes that end up with a larger number of students than at the beginning of the education, because previous drop-outs return and pick up on the education. By placing the educational institution as a key point and coordinator, couplings are established which clarifies the relevance of the education to the student and make central actors talk and coordinate their activities. It is also evident that the natural resources’ school in particular proves that very efficient mapping of the demand for labour within certain industries and the establishment of a school which has a larger target group than the Greenlandic, illustrate the strategic prioritisation in relation to an effort to educating relevant and requested competencies.

The major infrastructure problem of Greenland concerns their IT infrastructure which currently means that major cities are connected to a sea cable, whilst the rest of the country depends on a number of mobile transmitter masts. Sisimiut is expected to get connected to a sea cable shortly, however, the problem in relation to basing IT measures dependant on data traffic, remains in relation to villages and small cities. The Greenlandic institutions’ very efficient and practical orientation towards efficient solutions and a unified campus environment solves a number of specific problems, but in the long term, better (or cheaper) connections should be established or asynchronous solutions should be used. The use of technological solutions obviously depends on the extent to which the educational institution in question uses such solutions. For example, IT solutions can hardly be changed in relation to ARTEK without a coordinated collaboration with DTU.

3.6 Danish experiences

Until a couple of years ago, not many Danish municipalities have attempted to establish Study Lab-like concepts, and the Danish experiences are therefore based on pilot projects in Vejle, Kalundborg, Odsherred and Holbæk municipalities. The three last-mentioned municipalities have participated in the present Nordplus project in this connection they have acted as testing grounds throughout the project period.

However, three educational tendencies which to an increasing extent set the agenda in Denmark, mean that a number of municipalities are beginning to notice the potential in becoming an actor within the educational area. For the last 2 decades, Denmark has seen an increasing concentration of educations in fewer locations. This is due to demands from the Danish government that educational institutions are only allowed to offer education (public procurement law) if they are able to document a high academic level at a specific location. This, combined with a financial pressure on the educational institutions in Denmark, has meant that educations are concentrated in still fewer locations with a point of departure in campus concepts. This has meant that more and more cities in Denmark, which do not have an educational institution nearby, and especially the peripheral municipalities, are farther and farther away from the closest educational institution. This has resulted in a series of socio-economic consequences for a number of Danish municipalities.

Simultaneously, there was a municipal reform in Denmark, which meant that small municipalities were merged. Together, these changes meant that a number of Danish municipalities are starting to realise that, in order to maintain growth and development in their own municipality, they need to assume an active education-political role. And with the new, bigger municipalities, the municipalities now have the resources for them to be integrated in a joint national infrastructure – with a point of departure in a local perspective. This also means, from a municipal view, that we can observe an education-political change from a supply controlled educational structure to a demand controlled educational structure. The individual municipality cannot and does not have any local interest in supporting that its citizens can complete all sorts of educations. In a municipal perspective, this relates to the citizens completing the educations needed in the local area.

Therefore, we are starting to see a change in Denmark towards Danish municipalities without educational institutions beginning to assume the role as educational motor, but they do it from the mediator way of thinking which couples local jobs to local educational requirements. As mentioned in the above, there are still just a few examples on the motor and mediator function being converted to actual learning centres – local meeting places for learning in the municipalities, but this project has collected a series of experiences from four different pilot projects.

3.6.1 Vejle municipality

Vejle is the 6th largest municipality in Denmark and has approximately 54,000 inhabitants. Vejle is not able to offer university educations, and citizens who want to study must therefore go to the neighbouring cities, such as Aarhus and Kolding. Because of this, Vejle has established a Study Lab-like concept, called "Smart U Vejle". Smart U Vejle is an attempt to solve this challenge, and the purpose of the concept is to provide an easier and more targeted access to university activities, such as master modules, research collaborations, study counselling and internships.

Smart U has existed since 2013 and, as its primary activity offers a series of online modules combined with face-to-face teaching and counselling in Vejle with the teachers employed. The concept was originally called Smart University Vejle, which was subsequently changed to Smart U Vejle, as university is a protected term.

Smart U Vejle collaborates with Aalborg University on offering a series of Master of Information and Communication Technique and Learning modules which are managed by teachers from the university and University College Lillebaelt. The first module was offered in February 2013, and since then, 5,060 students have been enrolled in Smart U Vejle. The modules that Smart U Vejle offers, primarily focuses on the primary school area, which is a strategic focus area in Vejle municipality, which, at present needs to attract and retain more teachers. Furthermore, the education and research collaboration with IT & Learning Design (ILD), Aalborg University, follows the digitalisation strategy of Vejle municipality, which was adopted in 2011 with the purpose of ensuring the IT pedagogical development of the schools in the municipality. Furthermore, Smart U Vejle offers a master module targeted at librarians in collaboration with SDU. The offered modules each constitute 5 or 15 ECTS points, and the students follow the teaching asynchronously via the platform that the university provides. A module of 5 ECTS has 45 attendance days which takes place at the facilities of Vejle Library or at the Learning Lab of the municipality which has a classroom, study places and group rooms. The attendance days provide the students with the possibility of meeting their teachers, who are employed at a university or at University College Lillebaelt, face-to-face.

Smart U Vejle is driven by a strong motor function with a strategic focus on the school and library area. Furthermore, the concept is based on substantial mediator competencies in the persons involved, which strengthens existing networks and creates new connections within the prioritised areas, in order to match the requirements for competency development of teachers and librarians with the existing supply of education of the universities. In contrast, the virtual and physical meeting place is not a focus area, which is illustrated in two ways: Firstly, Smart U Vejle is only embedded in a physical location to a limited extent, as students and teachers only meet a few times during the course of the module. Secondly, Smart U Vejle is not involved in choices and development of the virtual platforms used in connection with the modules offered, as existing modules, which the universities have developed independently of Smart U Vejle, are used. One can thus say that Smart U Vejle functions more as an organisational frame for existing online university activities than as an actual meeting place. Simultaneously, this means that Smart U Vejle is not involved in the development of didactic designs for the modules offered, neither in connection with the virtual platform nor the teaching and counselling taking place at the attendance days.

Experiences

As described in the above, Smart U Vejle chose to focus their supply of education in relation to the municipality's strategic prioritisation of the school area, but the concept did not, like the concept of Campus Västervik in Sweden, emerge from a major municipal strategic effort that supports the municipality's work with this type of learning centre. Nor is Smart U Vejle developed in connection with a project financed initiative, like the pilot projects in Holbæk, Kalundborg and Odsherred.

The best way to describe the initiative is that it is a result of an innovative municipal culture with an experimenting approach. Smart U Vejle expresses major meta consciousness in relation to their own culture and describes the municipality, which, since 2011, has been a derestricted municipality, as an organisation with a tradition for working decentralised from a garbage can approach where commitment and interest is a greater driving force than strategy and political decisions. This is also reflected in the organisation of Smart U Vejle which is not driven by a strategically appointed unit, but by persons with special interests, competencies and network within the area. Finally, the municipality is described as a place where management lead the way in relation to creating a culture where daring is supported, where it is allowed to make mistakes and to spend time on it, and where value is given in relation to testing things. In this way, Smart U Vejle can be regarded as an extreme case, where it, according to themselves, “is prestigious to be wild and valuable to be cheerful and think out of the box”.

3.6.2 Kalundborg municipality

In a pilot project on the establishment of Study Labs in the municipality, Kalundborg municipality has been working with a target group which is characterised by the fact that the target group members request education, but they do not have the possibility due to distance. The group consists of people who are able to complete an education, given the opportunity. In relation to Kalundborg’s pilot project, the municipality chose to focus on Sejerø (a small island community in the municipality) in order to search for the possibilities of establishing a learning centre there. A workshop was conducted on the establishment of a learning centre on the island on the 8th of June 2015. People with an interest in participating in education offers participated in the workshop; a local politician and a representative for the residents’ council. Together they drew up the following plan for the learning centre:

- As a point of departure, the Sejerø learning centre should take into use a grocery store that had been shut down and set up the learning centre there, but after the workshop they decided, due to a better Internet connection, that the island school was a better alternative. The school is already a meeting place for a number of activities on the island.
- The point of departure is a centre that is open 24/7 with access for all citizens who are registered at the centre.
- A daily manager must be found. The daily manager must be paid. In addition to this, voluntary mentors must man the place. As the island has a limited population of highly educated people, the plan is to sign on the holiday house guests in order to draw on their competencies within education.
- A condition for using the centre is contacting the daily manager.
- As a point of departure, the participants must bring their own technological equipment, but computers and equipment for synchronous online teaching will be available at the school.
- The learning centre’s target group includes those of the island citizens who need qualifying exams and skill development. In particular, there is a need within 9th and 10th grade, higher preparatory exam, Danish as the a second language, math and dyslexia courses, and some people need a medium term education.
- The supply of educations should take its point of departure in the individual needs of the citizens, and to a smaller extent where more people can complete the same education together.
- An attempt should be made to pursue the target group citizens through the residents’ association and through the island’s Facebook page.
- The learning centre on Sejerø is owned by Kalundborg municipality.

Overall, the interviews and the workshops show that there is a need for education and continuing education on Sejerø. The residents' association and the workshop groups list a need for: electricians, trained personnel for the nursing home, social educator training, further training for the school teachers, that more people completes the 9th grade or the higher preparatory education, in order for them to move on in the educational system. The island needs local development. The island requests more families with children, and retaining those who are already residing on the island. This requires that there is work to be found on the island and that it is possible to complete an education or continuing education whilst residing there. The learning centre must therefore be a motor for the development on the island. This can be realised by the Sejerø learning centre functioning as a "mediator" between the island's need for labour, the individual citizen and the educational institutions. A part of the mediator function will consist of having an eye for future jobs, and the way in which jobs on the island can be maintained and developed, as the island experiences a reduction of the population and an increase in the average age of the population.

Experiences

One of the biggest challenges for a learning centre on Sejerø is that it has to be flexible. It must be possible to complete relatively many different educations and Sejerø is not able to provide enough pupils to establish classes. Simultaneously, the learning centre must be able to co-operate and innovate with the educations and the business community. A minor place, which is to offer many different types of education, requires many resources. This must be seen in relation to the fact that a learning centre on Sejerø would be a very small unit. Therefore, the focus should be on ensuring continuity and establishing an infrastructure, in order for operations not to depend exclusively on one to two persons.

The obvious thing to do would be to participate in a network of islands and local communities which face the same problems and collectively contact the educational institutions. For example, the Danish small islands have an association that works for retaining year-round residents. It could be a possibility for the association to work collectively on how to build up and offer learning centres on the Danish small islands and to form a group to collaborate with the education suppliers. The contact to the business community is easier to build and maintain from the individual learning centre, but in this connection as well it would be appropriate to spar with a network on new ideas and future job possibilities on the small islands.

The pilot project in Kalundborg has generated important knowledge on the potential and the challenges there are in relation to the type of learning centre which is physically embedded in a local area with a small population potential. The need for a critical mass on the user-side cannot be honoured by a single local area, but can only be fulfilled through partnership solutions and technologies, where several minor local communities join forces. This was not possible to establish in the short period of time available to the pilot project.

3.6.3 Odsherred municipality

Odsherred municipality's pilot project is a collaboration between the municipality's youth unit, the job centre and a business consultant who have worked together on possibilities and challenges in the municipal in relation to the establishment of a learning centre, as there is a need for initiatives to elevate the level of education in the municipality.

The focus was on two groups especially, who were able to form the starting point of further searches within the Study Labs mind-set

- The non-mobile
- Young people who have not completed primary school falls through the safety net and do not have the peace of mind to choose an educational path
- Academic labour in the municipality who are in need of an education and career development possibilities.

In the pilot project, Odsherred municipality chose to work with the target group of people who are capable of completing an education, given the opportunity. In the pilot phase, the following outline of a learning centre was developed:

- The municipality must perform the following functions
 - E-counselling
 - Study techniques
 - Study choice counselling
 - Homework assistance
- The centre will primarily be manned by a team of mentors (pensioners) who handle the above-mentioned functions. The municipality will hire a (part-time) coordinator to act as a link between the municipality and the mentor team, and perform other practical functions.
- The centre must be accessible from 10 a.m. to 6 p.m.
- Access is free of charge as long as you have an invitation.
- The centre must have broadband. There might be a possibility of borrowing technology, but the centre must be operated from the Bring Your Own Device (BYOD) concept.
- The centre will be placed in the same building as the local library or in a warehouse nearby.
- The decor will include a big room with furniture and partitions.

Odsherred Study Lab (SL) opened on the 1st of October 2015. Basically, the above-mentioned outline was realised. The SL was established as an integrated part of Asnæs Library with the same opening hours as the library (10 a.m. to 9 p.m.) and with the possibility of booking the support person from 10 a.m. to 4 p.m. The municipality financed the hours that the support person spent on SL. The support person's description of the function was: 'octopus giving counselling on study techniques' (as an example, guidance in relation to PowerPoint was mentioned). In the period of time that SL existed, a small number of students used the room (among others a thesis student and a biochemistry student).

In connection with the start-up of the Study Lab, a series of potentials and challenges were identified:

- As a consequence of the short time frame of the pilot project, the SL was not attached to specific educations and did not collaborate with any educational institutions in the region. This complicated the work in relation to attracting the target groups intended.
- The municipality does not have access to student data which could indicate how many/who of the citizens in the municipality that would match the SL target group (online students on medium term/long term higher educations, who have just began studying and who need assistance in completing the education). Therefore, the municipality is having difficulties identifying and contacting the target group. The students who are currently using the SL, are older students who have come a long way in their studies and would be able to complete their studies, even without the SL.

- When the project period expired, the SL was discontinued, and the physical facilities returned to their previous function as the study room/quiet room of the library without a support person attached.

Experiences

The pilot project in Odsherred generated important, specific knowledge on the potential and challenges of municipal learning centres which are intended to be physically embedded in the local area. It shows that a series of communicative, logistical and organisational infrastructures must be in place before it is possible to establish a physical learning centre. There is a need for organised collaboration with the educational institutions on accepting and supporting distance learning students. Such formalised collaborations should be developed and entered into on a formal basis (contracts), which was not possible to establish during the short period of time in which the pilot project existed. The work on attracting relevant target groups should be determinedly planned in relation to both the disclosure of which target groups it concerns and to the communication of the offer. This means that resources should be allocated to disclosing the actual job and thereby educational demands of the municipality and that registrations for educations should take place e.g. through the Coordinated Enrolment System. The learning centre initiative can very well be synthesised with other initiatives and placed on locations which already have a series of facilities at their disposal.

In general, it is necessary to focus on addressing a municipal learning centre as a strategic focus area and that the learning centre is embedded at management level in the organisation. It would be an advantage to establish a learning centre in Odsherred municipal in collaboration with neighbouring municipalities in order to obtain a network effect. Collaboration would render it possible for a municipality to supplement the agreements already entered into by another municipality, e.g. about the establishment of classes.

3.6.4 Holbæk municipality

During the project period, Holbæk municipality has mainly been focusing on the importance of the motor function being strategically embedded in the municipality. With a point of departure in the collected experiences from the other Nordic countries, Holbæk's project group has therefore been working on generating political support – not for a pilot project, but for a full-scale project with the establishment of a municipal learning centre based on the three functions: motor, mediator and meeting place. This was accomplished during the project period, as, in the spring of 2016, Holbæk municipality allocated DKK 3.3 million for the establishment of a municipal learning centre based on experiences of the Nordplus project. The municipality decided to implement the concept in a school that was shut down in the centre of Holbæk, where also three relocated governmental workplaces (will be relocated in 2017) will also be placed. The three governmental workplaces are: The Danish Evaluation Institute, The Danish Accreditation Institution and the Danida Fellowship Center which, together with a municipal learning centre would, in a Danish context, be able to establish a unique knowledge and education cluster focusing on the generation of knowledge on new concepts within education for rural fringes and for municipalities which currently do not have an educational institution located in the local area.

Experiences

Holbæk municipality's work on establishing a municipal learning centre is exemplary in relation to illustrating the importance of Nordplus supported projects, where institutions from various Nordic countries meet and share their experiences. Without this project, the decision on establishing a motor, a mediator and a meeting place in the municipality in the shape of a Study Lab – or as we call it in Denmark, a municipal learning centre – would probably not have been taken.

4.0 Conclusion and recommendations

As mentioned in the introduction, the countries participating in the project face similar national, regional and local challenges, but they have completely different prerequisites and priorities in relation to solutions. The presented cases illustrate the major variation there is in the solutions of the various countries. A “normal” or generally applicable model for the definition of a learning centre, the purpose of a learning centre, the way in which a learning centre is established, which target group(s) a learning centre has, their financial, organisational and local embeddedness or the extent of their development potential, can thus not be deduced. Instead, each case gives insight into aspects influential to the local area and the particular context that drives and/or confines the specific activities of the learning centre in question. The introduction to learning centres brought three general concepts into play which are pivotal as an analytical grip in order to cross-view the presented cases. ‘Counselling’ concerns the multifaceted aspects of the learning centre supporting its target group in making intelligent choices in relation to their situation, ability, resources and local demands. ‘Couplings’ point to the necessity of various local actors staying connected in networks and coordinating their efforts in order to create a path for a citizen to employment through education.

‘Mapping’ concerns the learning centre’s activities taking their point of departure in specifically identified demands in the local community, so that the activities are beneficial for both the individual citizen and the society.

Counselling

A distinct feature in several of the learning centre’s success experiences is their focus on the user group(s) which the learning centres approach. It is obvious that the learning centres in question:

- A. know their target group’s needs
- B. scaffold everyday practice (study habits, study coordination)
- C. attempt to reduce entry barriers and competitive interests
- D. plan systemic educational paths

For example, in the Nitus association, the Swedish learning centres have clearly disclosed certain target group needs for local education (A). The provision of study activities that can be adjusted to other work obligations (e.g. the fishermen on Iceland) is an example of scaffolding everyday practices (B) and the elimination of a barrier which would otherwise interfere with the attention to an education (C). And the focus on coherence and coordination between the educations in Greenland that exists present an example of how to establish an educational path for the student (D), which will ease the transitions from one system to another.

A series of contextual indicators, e.g. the characterisation of the facilities and locations available and the learning resources available to the students. But, questions such as where and when the learning centres will take place, who will facilitate them, which resources are available, the target group and which pedagogical choices are made, do not necessarily give a reply to how much success the learning centre in question has and by which factors the success is measured.

The most distinct indicator in relation to counselling is that profound and wide domain knowledge (socially, culturally, personally) of the target group is essential for the organisation of the learning centre.

Couplings

The learning centres observed operate in different contexts with different interested parties. Several centres succeeded in establishing beneficial collaborations and synergy effects between various organisations. As for several learning centres, it is obvious that a large part of it the result of passionate people working hard to make things work.

A related effect of the fact that passionate people are holding positions with responsibility is that these persons are often very good at networking and thus try to locate and establish couplings to other institutions.

At the same time, it is obvious that, in order for such couplings not to stand and fall with these passionate people, there is a need for the work on establishing coupling and networks to be institutionalised, e.g. as double allocated employees, as described under the Swedish experiences.

It applies to several centres that the centre is a natural pivotal point for many different activities and thereby the attainment of implicit and explicit objectives.

The methods, resources, infrastructure (political, financial, geographical) and requirements of the centres vary a lot and there are no distinct characteristics in relation to the learning centre's perception of their task, their own designation, their use of technology, materiality, pedagogical designs, supply of educations, participants, the way in which the centre is otherwise embedded in the local community. However, it is characteristic that more of the learning centres:

- A. adapt flexibly and fast in relation to which new tasks it is possible for them to take on.
- B. are responsive to local, situated problems and the possibilities of solving several problems for several interested parties by using the same solution.

Mapping

Mapping the local requirements for skilled labour, contact to the educational institutions, business community etc. is obviously one of the biggest and most important tasks for these learning centres. Specifically for the potential student, mapping the requirements for skilled labour in the local area gives the student the incentive to choose a certain education. To the local community and the region, the mapping creates a coupling between educational strategy, job and settlement strategy and in some cases also a correlation in relation to social problems. The local business community, both public and private, and the educational systems involved benefit from the fact that the dialogue which would otherwise have to be taken between them, can be taken through a public mediator.

Recommendations

Based on the project's observations, it is our clear recommendation that current and future learning centres focus on and further develop the three elements:

- Extensive mapping of the local requirements for skilled labour
- The use of resources for the establishment and retaining of couplings between different actors in the local community
- Support and scaffold students and potential students in their way through the educational system

The mapping should be conducted in close dialogue with the companies' HR departments, local decision-makers and similar actors who are recruiters of skilled and trained labour. The mapping should be continuously updated and linked with a dialogue with relevant education suppliers concurrently with changes in requirements and emergence of new requirements.

The networking, e.g. through the inclusion of decision-makers in advisory boards, fundraising, double allocated employees and collaboration agreements should be professionalised and a part of the centre's objective.

The scaffolding of students should be executed by trained employees who are capable of assessing and offering competent support in relation to academic advice, study technical support, ordinary study counselling and career counselling. Simultaneously, to a large extent, this counselling should be targeted towards the learning centre's general focus and offers.

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