Sitting on gold - A report on the use of informally acquired skills

A Greenland perspective publication

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SITTING ON GOLD

A report on the use of informally acquired skills in Greenland

UNIVERSITY OF COPENHAGEN

ILISIMATUSARFIK
University of Greenland

A GREENLAND PERSPECTIVE PUBLICATION

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FOREWORD

Greenland is a unique place that offers a lot of possibilities for sustaining a good life.

The Greenland society offers most of the population good lives and the vast majority of Greenlanders self-report leading good lives. However, a large minority is challenged by unemployment and lack of education. Some of this is based in social and health problems, but this group also includes very competent, skillful and well-functioning people. Their problem is, that their skills are acquired in informal ways and for that reason invisible and unrecognised by the job market. The lack of appreciation of the qualifications of this group constitutes a great loss of value to society and to the individual.

The aim of this synthesis report is to shed light on the phenomenon of informally acquired skills, on ways to document and map these skills within the Greenlandic society, and find means to release this vast potential to the benefit of both the persons involved and the society in general.

The present report is based on a workshop at the Arctic Circle meeting in Reykjavik 2015, and an anthology of research papers on the subject.

The work has been supported by a generous donation from the Dr Frederik Paulsen Foundation. It is our hope that we can contribute to making the skills and potentials of those having no formal education more visible and thus make this group better appreciated and more attractive to the job market in Greenland.

Some of the measures to activate and augment informally acquired skills include internships and in-job skill training. This will often require subsidies in the training period to be attractive for companies and institutions. This could be the focus for a Training and Activation Fund based on private philanthropy and/or public grants.

Professor Minik Rosing, head of Greenland Perspective

INTRODUCTION

A large group of people in Greenland are in danger of marginalization because they have no formal education. This reduces their chances of employment and in general they have fewer options in life compared to their better-educated peers. It is not only a problem for the persons in question, but for the Greenlandic society in general. Greenland cannot afford to waste its human resources.

Even though many initiatives have already been taken to amend the situation it is high time for an increasingly modernized and globalized Greenland to seek alternative paths and look at the country's human resources in new ways. If Greenland shall be able to claim its fair share from emerging industries to secure the political goal of maintaining a welfare state with a high service level, an equal distribution of living standards and a strong democracy, a new and stronger focus on developing all human resources is a must.

The outset of this report is that lack of *formal* education does not equal a lack of skills. One of the contributors to the anthology behind this report put it this way: "*Greenland might be sitting on an under-explored reserve of gold. Not the reserve in the ground, but the warm gold in the shape of human resources.*"

Like all people, the Greenlandic people possess a broad spectrum of skills that are neither acquired from nor recognized by the formal education system. Many of the Greenlandic skills are indispensable when operating in the Greenlandic and broader Arctic environment.

Even if informally acquired these skills might be highly relevant for both existing and emerging industries in Greenland be it fishing, mining, tourism, agriculture or other industries. I

SITTING ON GOLD

In this report we investigate how informally acquired skills could be activated towards development of the Greenlandic society.

Is it possible to match informally acquired skills with a formal labour market? Do special Arctic or Greenlandic conditions call for special considerations? Could a system of Recognition and certification of Non-formal and Informal Learning Outcomes be a possible solution? And if so, is it possible to identify which skills are relevant on a future labour market?

In the title we use the metaphor "*sitting on gold*". Just like it is rife with complications and pitfalls to develop a Greenlandic mining industry and extract actual gold, it is demanding and complicated to activate human resources. It requires action and investment on behalf of

companies, authorities and families. In brief: The whole society - including researchers – must play a role. The human resources cannot easily be harvested. It requires some kind of intervention and researchers might be able to contribute, not just by pointing out the existence of the resource, but also by pointing towards ways to "extract" it.

This is a question of broadening the palette of opportunities for each individual and allow every citizen the opportunity to make active choices for their lives and their participation in society.

Such questions also lead to a broader discussion of the objectives of society:
Is identification of human resources always about matching the labour market or does recognizing people's skills also have political and personal value? How important is it to have a majority of locals employed in a given industry? Is regional development a priority? Is the strengthening of qualifications mainly for the economically active people or is it for everyone? And on a more philosophical level: What constitutes a good life in this society - how do people actually wish to live their lives and balance work, family and other activities?

STRUCTURE AND METHOD

This report is based on the anthology *Perspectives on skills* presenting insights from 20 researchers, organizations and companies who either works in Greenland, do research related to Greenland, or do research on themes relevant to the subject of this report: Informally acquired skills and how to improve recognition of these skills as well as finding ways to systematize the efforts of recognition.

The full list of contributors comprises a variety of disciplines and nationalities from economy to anthropology and from the Netherlands to Greenland. The report also draws on insights from dialogue meetings with stakeholders in Nuuk and a workshop at the Arctic Circle Assembly in Reykjavik in 2015. At the workshop the Greenland Perspective publication Everybody on board (Kleist et al. 2015 - published at www.greenlandperspective.dk) that assembles facts on "who, where and how many" when talking about informally acquired skills was presented. The present report also draws on this publication.

This synthesis is our "interpretation" of the provided research and does not necessarily represent points of view of all of the authors of the anthology, since they represent a variety of theoretical standpoints. However, we believe these many different perspectives have added to the quality of the present report because more details and nuances are brought into play in a holistic way.

For anyone with an interest in this subject, we strongly recommend to read the full articles in *Perspectives on skills* as they present a whole range of insights and ideas on the thematics of this report. The articles in themselves represents quite a goldmine of knowledge and this report has only extracted part of its gold nuggets. Unless otherwise stated, all references in this report are from the anthology.

The report comprises 7 main chapters: Chapter 1 defines how informally acquired skills can be described. Chapter 2 - 3 describes the current situation and document what could be gained from transferring people with informally acquired skills from being a burden into becoming a resource. Chapter 4 describes a range of local examples of how the educational system is developing and how companies bring informally acquired skills to use. Chapter 5 describes different approaches to matching and activating skills, chapter 6 sums up different takes on how to recognize skills and lastly, chapter 7 lists the ideas working on this report has generated.

We hope that this report can spark a discussion, bring new ideas and draw attention to the goldmine of human resources, which Greenland has access to.

SUMMARY

Even though the level of education in Greenland is on the rise, a large number of people are living a life on the edge of "formal society". At the same time there is a continuous import of labour from other countries, mainly Denmark.

Greenland hopes for and actively promotes new industries and the demand for educated labour is rising. At the same time the country aims to maintain a high level of welfare for an ageing population. This poses a challenge: Turning the "residual group" from a problem into a resource, for their own sake and for the sake of society as a whole.

We have listed 8 focus points for policy makers, companies and organizations to consider as a means to meet the challenge and to activate a valuable but wasted human resource for society.

We have found that there is a potential in identifying, recognizing and activating existing competences within Greenland and matching them with present and future needs. While formal education is still the main road towards development of society and for the individual, there is both a potential in focused matchmaking with companies, expanding CSR activities and in creating more flexibility in jobs – especially in smaller towns and settlements – by combining formally and informally acquired skills across sectors and by creating new partnerships between private and public stakeholders.

Existing research and experience from current programs in and outside Greenland indicate that documenting "invisible skills", understanding and including the cultural dimension, focusing on personal development and amelioration of personal problems are essential components if programs aiming at upskilling the residual groups shall be successful.

The economic incentives for taking up the challenge are also very real. There is a potential of improvement of 13 million DKK per year for the Greenlandic public finances if just 100 people could be transferred from social welfare to a job in the private sector. A mere 1% increase in employment would improve the budget by about DKK 35-40 million per year. This is a significant effect underlining the importance of "bringing everybody on board".

The most important finding however is that all initiatives must be shaped in a stable and long term collaboration between companies, educators and municipalities. A close cross-sectorial dialogue between stakeholders in order to develop a systematised way of recognizing informally acquired skills seems to be worth aiming for.

1. DEFINING INFORMALLY ACQUIRED SKILLS

There is no one single way to describe the concept of informally acquired skills or how they can be utilized and recognized. Here we use the terminology of informally and non-formally acquired skills to describe the skills that lie outside of the skills acquired in a formal school setting[1]. It is important to stress, that it is the context that is informal, not the learning, and even less the learning outcomes – the outcomes of informal learning might just as well be used in a formal setting as a skill acquired in a school setting .

A clear difference should also be made between two widely used terms: Competence and qualification.

A *competent* person is capable of doing something, and/or knowledgeable within a given field. A qualified person is someone who possesses a document that confirms that s/he is capable of doing something, and/or knows something. A competent person may not be qualified, if s/he has never been assessed.

Therefore, the person's competences are not visible which is a major obstacle when it comes to generating revenue within a formal economy, where the highest and the most stable revenues are found along with social protection. A qualification is a pass to employment.

Informal and non-formal learning is often obtained in relation to subsistence-, family- or hobby related activities. In a Greenlandic context it could be through hunting and fishing but also through playing music, computer games, skiing, dog-sledding or arts.

Often when discussing informally acquired skills

FORMAL LEARNING is organised (e.g. at school, at university or at the work place). It is therefore always intentional and it has objectives in terms of learning outcomes.

INFORMAL LEARNING is experience. It is never intentional and does not have spelled out learning objectives. It takes place by the mere fact of experiencing the world around us and it can happen at home, at the workplace or through participation in voluntary activities typically.

NON-FORMAL LEARNING is in between the two, and its definition varies depending on the country and the context . It is often associated with adult learning (e.g. Africa, Germany and South East Europe) but it could be a second chance for basic education (Morocco). It could also be side learning that takes place alongside a formal learning programme. For example, it is well known that, in attending formal learning sessions or validation of non-formal and informal learning programmes, adults learn about themselves, learn about working in teams, learn about social customs. This learning is additional to the initial learning objectives. It was not planned but it did occur.

1 Definitions are based on Werquin, 2016 in Perspectives on skills.

in an Arctic context the focus is on local and traditional knowledge and culture. Although this is not the whole truth – especially not for young people in the bigger Greenlandic cities – it is relevant to describe this type of learning more in depth.

TRADITIONAL KNOWLEDGE IN A MODERN SOCIETY - A POTENTIAL FOR INTEGRATION

Traditional environmental knowledge (TEK), local, -or traditional knowledge (TK) is probably one of the most widely documented and (maybe in consequence) most contested concepts in the study of indigenous peoples' environmental knowledge[2].

Definitions of TEK range from 'knowledge about the environment, knowledge about the use of the environment, values about the environment, and the knowledge system itself' to conceptions of local knowledge as 'part of social, cultural and political processes which take place at the local, national and global level'.

Although discussions and examples of local or traditional knowledge are occasionally voiced by Greenlanders, for example, when speaking about climatic changes or fisheries and hunting development, formal acceptance and official recognition of traditional knowledge and its use-value is still needed before implementation can be considered.

THE DANGER OF "FREEZING IN TIME"

Critics have observed that, by focusing solely on the 'traditional' aspect, it inadvertently freezes local knowledge in time by failing to acknowledge and take into account the dynamic and constantly changing nature of TK.

But on the other hand TK has proven successfully engaged, documented and employed in Greenlandic cases where locally based environmental monitoring projects have been tested and acknowledged. It should also be underlined that local knowledge is more than TK since it can be possessed by people who occupy formal functions in a society - local knowledge can thus be a synonym for "key players" in a society .

Traditional, or indigenous, knowledge is often passed on by individuals between generations and knowledge sharing is built into traditional customs and facilitated through both training and traditional activities.

In Greenland, as elsewhere in the Arctic, a majority of local household economies are often either directly, or indirectly, involved in the harvest of renewable resources and continue to rely on indigenous traditional knowledge.

ENVIRONMENTAL PROGRAMS BENEFITTING FROM LOCAL EXPERTISE

A field-based system for monitoring and managing resources specifically developed for Greenlandic fishermen and hunters to document trends and track the relevant conditions of living resources and finally propose management decisions for the resource in question themselves has been developed.

The system is **based on traditional knowledge practices**. Although there are still many uncertainties about how exactly to translate environmental knowledge into decision-making and action it has been found that **involving local stakeholders in monitoring increases the speed of decision-making** for tackling environmental challenges at the executive level of resource management.

Results from these, and related projects, suggests that community based participatory monitoring could be an important first step in translating and **integrating traditional knowledge with relevant areas of research and industry .**

2 Section based on Hansen et al, 2016 in Perspectives on skills

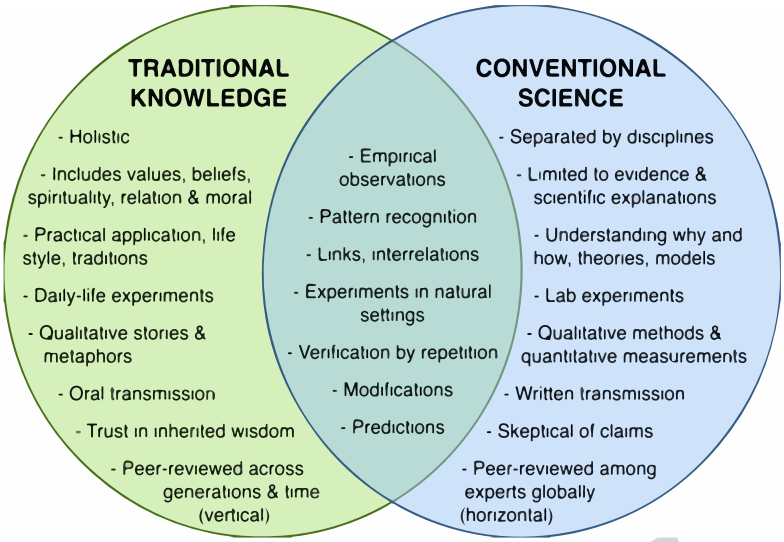


Figure 1: Traditional Knowledge versus Conventional Science: Overview of characteristic similarities and differences between the two knowledge systems. Source: Hansen et al. 2016 in Perspectives on skills

For some this is a choice, for others a matter of lack of possibilities. Research on the topic of TK in Greenland is however limited and it might be of interest to further explore how TK could be used in formal settings.

The relationship between TK and conventional science can be illustrated as seen in figure 1. In some areas there is an overlap and these overlaps constitutes areas where traditional knowledge can be used in a more formal setting.

TK might be useful in the emerging industries be it within tourism, raw material extraction or other types of industries. There are several examples of people using their informally acquired skills such as navigation skills, technical skills or skills that lies within the area of food or handicrafts to provide services for groups such as researchers, exploration companies and tourists.

DOCUMENTING LOCAL SKILLS

An example to illustrate the point is the Mary River iron mine in Baffin Land , which is under development. In preparation the local Qikigtani Inuit Association has conducted a labour market survey to map the formally and informally acquired skills of the potential local workforce for the coming mine[3].

The Survey showed that:
- 64 % had less than high school education
- 18 % lack English fluency
- 69 % may lack computer skills
- 48 % have no experience working two-week rotations
- 41 % do not have a personal bank account

But many had other skills and experiences relevant to jobs at the mine:
- Camp services – 42 %
- Health and safety – 41 %
- Construction – 34 %
- Preparing country food – 85 %
- Hunting/fishing – 83 %
- Navigation 45 %

It remains to be seen whether locals of the area will succeed in being employed at the mine, but this type of mapping might be a way to identify and make skills outside of the formal system visible to future employers.

In a Greenlandic context it might be interesting to investigate further whether and how TK can be used - not necessarily according to a western

3 Kleist 2016 in Perspectives on skills

model of society but rather in a modern Inuit society where activities may be combined without compromising the opportunity to continue the traditional activities of Greenlandic society . To date there has been no systematic efforts to map people possessing TK and matching them with jobs like it has been done by the Qikigtani Inuit Association.

This could be a research project or even a task for Greenlandic labour market stakeholders. A mapping could also include "modern" informally acquired skills such as modern hobby related activities in order to obtain a fuller picture of how these skills are distributed and developed, who posses them and even how companies or organizations see the way they could be used in their line of work.

2. WHAT IS AT STAKE

Greenland is in many ways striving to be and has succeeded in becoming a modern welfare society. But the challenge of unemployment and too large a group of young people outside the formal educational system and labour market is real.

A DECLINING NUMBER OF PEOPLE

There is a stable tendency towards fewer people living in Greenland. This means fewer hands to work, which again means fewer people to secure the future of Greenland. By January 1st 2016 the number of people in Greenland was 55.847 persons. Thus, the population decreased by 137 persons during 2015 and the population count is the lowest in 20 years[1] .

Figure 2 shows the population projection for the potential workforce until 2040. If the projected development comes true, the workforce will be diminished by more than 5000 people compared to today. This development stresses the urgency of using all available resources in the best possible way.

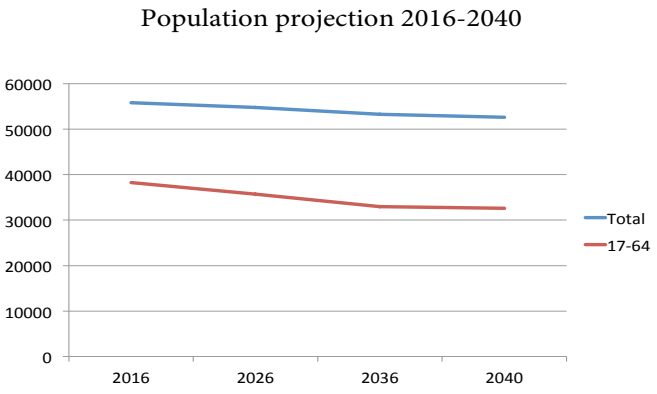


Figure 2. Population projection for the Greenlandic work force. Source: Statistics Greenland

1 Statistics Greenland, February 2016

TRADITIONAL JOBS DISAPPEARING

Besides facing the challenge of fewer people, there is also a challenge in the fact that more jobs are disappearing than are being created. The tendency towards fewer jobs in the primary sector and a creation of jobs in the public sector – calling for people with a higher educational level – is stable and clear and reflects a global tendency towards more jobs demanding a higher education.

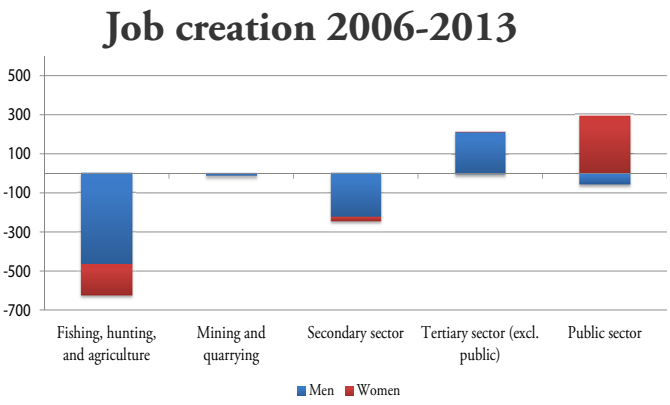


Figure 3. Development in sectorial occupation 2008-2013. Source: Statistics Greenland.

Especially the primary sector has experienced a negative development as shown in figure 3. The fishing sector has become more efficient and a number of fishermen are doing extremely well. But more than 600 jobs within this sector have been lost over a 5 year period from 2008-2013. Of these, more than two thirds were occupied by men.

In the same period of time the public sector has grown by about 300 new positions of which women have occupied almost each and everyone. In total, about 100 new positions

have been established between 2008-2013 while approximately 500 jobs have been abolished.

MANY UNEMPLOYED - MORE PEOPLE IN PIAREERSARFIIT

Even though jobs have been disappearing, there are reports of a decrease in the number of unemployed. In the first months of 2016 the total number of registered unemployed in Greenland thus showed a fall of approximately 700 people compared to the same months in 2015[2] .

These numbers seem to indicate that there has been a creation of jobs even though the general share of unemployed in 2015 is yet to be published. It is thus difficult to say whether or not the share of unemployed has in fact decreased. The Economic Council of Greenland has projected a positive economic growth for 2015 and this might indicate, that a creation of jobs has taken place.

Year	Average number of unemployed/ month	Share of labour force	Number of people enrolled in Piareersarfiit
2015	-	-	921
2014	2754	10,3	N/A
2013	2725	10,1	1132
2012	2655	9,8	1045
2011	2518	9,4	652
2010	2056	7,8	714

Table 1. Source: Statistics Greenland and Ministry of Industry, labour and trade Share of unemployed for 2015 are not yet available.

There is however still a need for further job creation and a need for looking into how people without formal education could potentially be matched with new jobs.

Other factors to be taken into consideration when looking at the current decrease in number of people to be registered as job seekers are the significant number of people moving from Greenland to other countries. An average of 600 people per year has left Greenland during the last 3 years[3], and a rising number of people enrolled in the Piareersarfiit-system of education for those who have not acquired the needed skills in primary school.

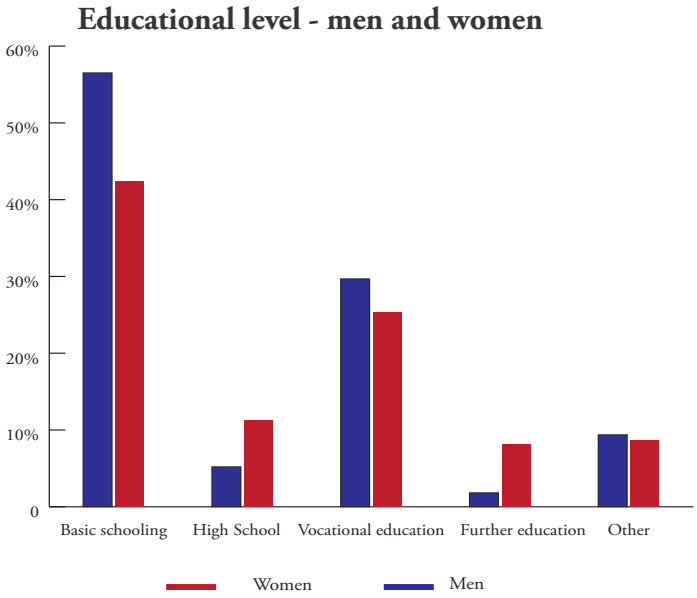
PIAREERSARFIIT – AIMING FOR EDUCATION OR JOB

Created in 2007 for unskilled workers under the age of 50. Has elements from the employment sector, educational sector and counselling sector. The purpose is to "… deal with areas such as employment, counselling about education and jobs, development of competences, qualification and re-schooling/-educating the workforce … with the aim of getting an education or getting a job …" The largest educational institution (apart from elementary school) measured in terms of participants. In 2012 an evaluation of the Piareersarfiit centers deemed the combination of educational policy, employment- and labour market-policy as mutually beneficial because students' transitions from one area to the other are handled in the same place/ same office and by people who are familiar with and have respect for the culture of the students. Statistical data from the Ministry of Industry and Minerals Resources tell that the percentage of students that graduate lie between 83-87 % during the period from 2011-2013 . In the coming years, Piareersarfiit will expand its activities in order to motivate marginalized young people for enrolling into education.

Piareersarfiit is today the second largest educational institution in Greenland with primary school as the largest. The rising number of people enrolled here might contribute to the change in the unemployment statistics.

2 Statistics Greenland, May 2016

3 Tendencies in the Greenlandic economy, 2015. www.nationalbanken.dk



Figur 4: Grouped according to highest achieved education for the age group 30 years in 2013 Source: Statistics Greenland

MEN ARE CHALLENGED IN THE FORMAL EDUCATIONAL SYSTEM

The general number of people enrolled in education in Greenland is on the rise and a growing number of educational institutions emerge in Greenland, thus widening the range of opportunities for education. The number of commenced educations is significantly higher today than just 10 years ago.
However, there is also an increase in drop-outs and therefore the increase in completed educations is more moderate. As seen in figure 4, the educational challenge is greater for men than for women as women tend to obtain a higher educational level than the men.

Combined with the fact that jobs in the primary sector are disappearing, this points towards a need to specifically address men as a target group for initiatives dealing with informally acquired skills.

MANY YOUNG PEOPLE OUTSIDE OF THE SYSTEMS

There is also a large number of young people who stand completely outside of the educational system. The latest numbers from Statistics Greenland[4] showed, that, by the end of 2014, a staggering 38 % of the group of young people at the age of 16-25 years are not enrolled in education nor do they have a job (the residual group in figure 5).
These numbers have been steadily growing for some years. While the number of young people participating in educational activities is on the rise, the number of young people having a job has fallen quite a bit - approximately 600 fewer "young jobs" in 2014 compared to 2009.

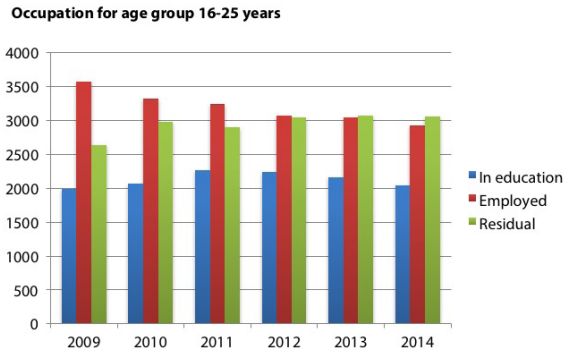


Figure 5. Source: Statistics Greenland, May 2016

One reason behind this fact might be emigration to other countries although the number of young people has not reduced as much as the number of "young jobs".

It is important to keep in mind that being outside of the system is not necessarily involuntary. A group of the young people who do seemingly not have a job might have small occupations or might be living another type of life than the "modern" life. Others are temporarily outside of the system due to maternity leave or temporary sickness.

Although numbers might thus come with some insecurity - and the fact that numbers for 2015 are not yet available - it seems that the challenge is significant, but also that there could be an enormous potential in activating the resources of young people in Greenland.

A MORE FORMALISED LABOUR MARKET

It is a noteworthy trend, that the labour market attaches more importance to formally acquired qualifications. As seen in figure 6 the

4 http://www.stat.gl/dialog/main.asp?lang=da&version=201601&sc=UD&subthemecode=o3&colcode=O

Formal education is the road to employment

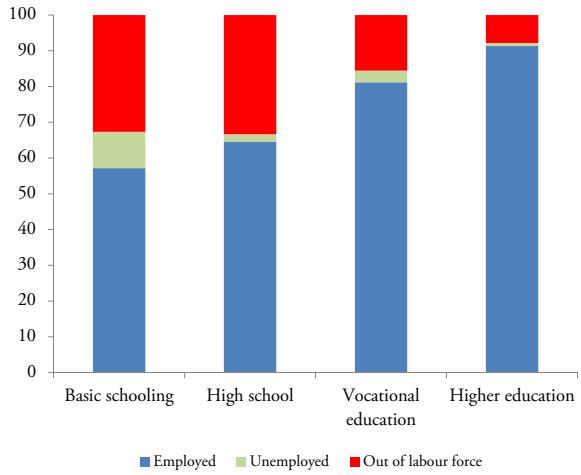


Figure 6. Source: Andersen 2016 in Perspectives on skills

employment rate is high for people having obtained a higher education and low for people having only obtained a basic schooling. This clearly points to lack of education as a binding barrier to employment for many, and at the level of society a main reason why it is difficult to increase employment.

This does not deny the importance of informally acquired skills, on the job-training etc., but it is a fact that more jobs require formally acquired qualifications.

A GEOGRAPHICAL CHALLENGE

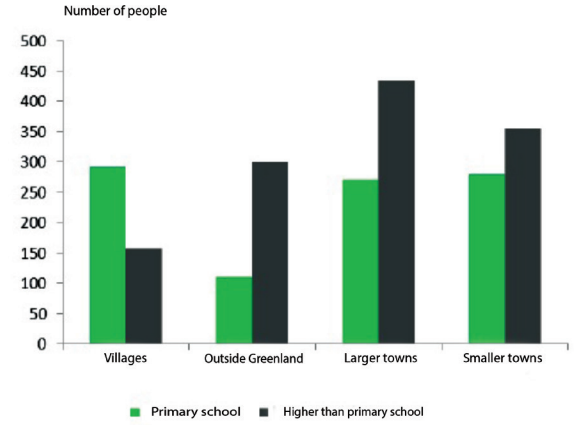


Figure 7. Source: Economic Council of Greenland

There is a significant difference in educational achievements between youth growing up in villages[5] and towns.

5 In this report we use the word "village" where some use the word "settlement"

In a study by the Economic Council of Greenland it was found that 10 percent of those who attended public schools in towns obtained a short further education, while it was only 3.5% for those growing up in a village. Hardly any from villages get a higher education, but the fraction of those growing up in towns that get a higher education is also small (1-2%)[6].

This tendency is also illustrated in figure 7. It is clear that where you live when you are young determinates your level of education. The probability of getting an education besides primary school is low in villagess, higher in towns and highest for young people living outside Greenland.

BUT THERE IS ALSO A PARADOX

Despite the fact that the unemployment is

Share of unskilled labour

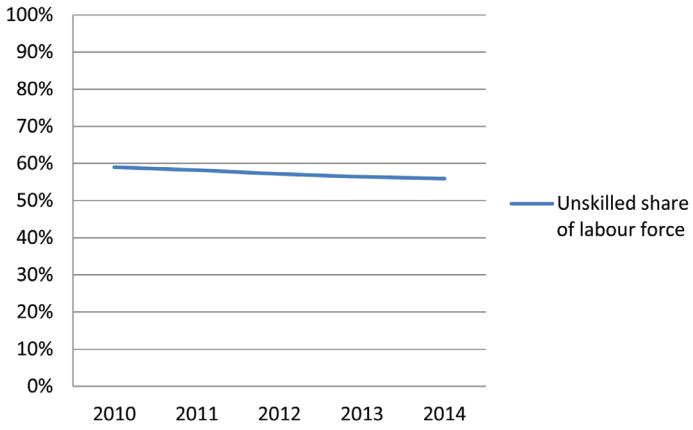


Figure 8 Percentage of unskilled workers in Greenland's total workforce. Source: Statistics Greenland

significant, the most binding constraint at present is not shortage of jobs but shortage of qualifications, given the fact that a majority of the workforce is still unskilled. Even though the educational level is on the rise, there is still a large majority of unskilled workers in the Greenlandic labour force. In 2014 about 55 % of the labour force was unskilled. Obviously this is a challenge in a labour market becoming increasingly focused on formal education.

6 Andersen 2016 in Perspectives on skills

Jobs are available as seen from the need to recruit employees from outside Greenland. Some sectors experience bottleneck problems: When a sector is booming or a large project is initiated it can be a challenge to recruit enough labour locally.

Recruitment of labour from outside will thus still be needed in any realistic scenario for economic development, and it is part of the international "division of labour". But human capital and work capabilities in the local population can be used more and better - there is a potential for more local recruitment.

AN ISLAND ECONOMY AND GROWING INEQUALITY

The economic challenges facing Greenland are multifaceted. Economic development is needed to improve living standards and make the economy self-sustaining.

It is important to stress that a prerequisite for a successful development process is not only increasing average incomes but also that all are provided with an opportunity to participate and become self-supporting.

At the outset, inequalities are large in Greenland. Income inequality measured by the so-called Gini-coefficient[7] is about 35 (and rising), while it in the Nordic countries is about 25. About 15% of the population live in relatively poor families , 10% in poor families, and 5% in very poor families[8]. Even among those in work about 40% have an annual income below the SIK[9] minimum wage. Social problems for children and youth are well documented, pointing to both the role of social factors and severe barriers to equal opportunities.

Among the reasons behind Greenland's financial problems lies the fact that Greenland has very particular conditions for economic development. Although, Greenland is the largest island in the world, the country should be viewed as a micro-state[10]. It is not one, but essentially an association of 75 small or small island economies. In an international perspective, most micro-states are characterized by a large volume of imports and simultaneously by mono-base export or revenue. Their export often consists largely of unprocessed raw materials, or the earnings are based on 'seaside tourism'. At the same time, micro-states often rely on external professional labour in a number of vital and subject-specific areas. For island operation societies, it is also the case that it is difficult to commute on a daily basis, and that each island operation society must have its own infrastructure of supply. Greenland match these characteristics.

Most trade currently takes place via the Greenland Port in Denmark and there is almost no direct trade between towns or villages internally in Greenland. Exports are relatively unprocessed fish and shellfish; dependence on external labour is seen throughout the country and it is impossible to commute on a daily basis.

At the same time there is the challenge of a costly and complex infrastructure of supply. Each village produces its own supply of electricity, and a backup supply. Transport infrastructure is costly. In areas that are closed by the winter sea-ice, storage capacity and supplies for longer periods are needed, just as the capacity for keeping the catch frozen until the first ship arrives is crucial.

7 With a completely equal distribution of income, the Gini coefficient is zero. The larger the coefficient, the more unequal the distribution of income. Andersen 2016 in Perspetives on skills.

8 Relatively poor families have incomes below 60% of the median income, poor families have incomes 50% below the median, and very poor families have incomes below 40% of the median income

9 In 2013 about DKK 180,000. SIK is the workers union

10 Hendriksen 2016

3. WHAT CAN BE GAINED

The facts and numbers speak their own clear language: Greenland is standing on a burning platform.

This makes it essential and highly interesting to look at how to systematically recognize and include informally and non-formally acquired skills in the Greenlandic labour market, and to investigate how society could use human resources in a more efficient and inclusive way. The potentials are relevant on an economic, democratic as well as on an individual level.

THE ECONOMIC POTENTIAL

The actual effect on public finances of being able to include more people into the Greenlandic labour market is significant. An example could be an unemployed person – either holding a disability pension or receiving social welfare taking a job paying the SIK minimum wage[1]. The net effect

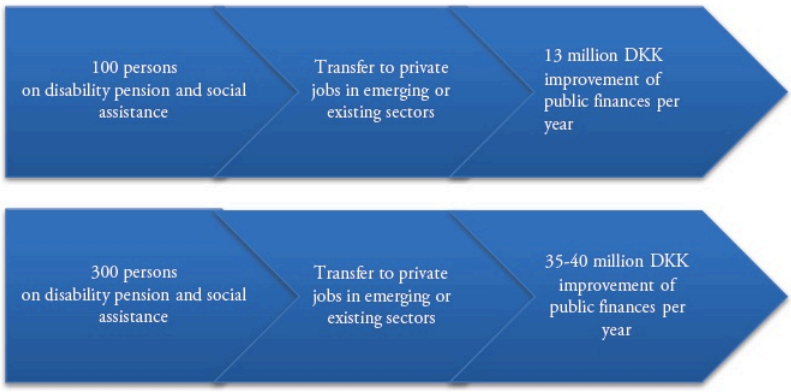


Figure 9. Effects on public finances

for the public finances of moving an unemployed person from social welfare to a private sector job lies between 108.000-167.000 per year per person, depending on the person's life situation (married, with or without children)[2].

Clearly, the higher the income when employed, the larger the budget effect, due to higher tax payments. But even transferring from no job to a relatively modest income would be of great significance for public finances. For persons receiving disability pensions the one-year budget effect of a transition into a job is about DKK 150,000, and slightly less for persons on social assistance. These estimates only give the direct effect and not the indirect effect via e.g. taxes levied on consumption, and as such they are lower bound estimates of the budget effects.

As shown in figure 9, an increase in private employment of say 100 persons (say 50 on disability pensions, and 50 on social assistance) in one year will improve public finances by about DKK 13 million. Total employment is about 30,000 persons – hence a 1% increase in employment will improve the budget by about DKK 35-40 million. These are significant effects underlining the importance of "bringing everybody on board".

A STABLE AND LOCAL WORKFORCE

There is an enduring dependency of the administration and private businesses in Greenland on foreign, mainly Danish, employment[3]. For almost three decades, Greenlandic politicians have been debating how to change that – but it remains a problem to be solved. Two major identified reasons (out of many) are the limited supply of qualified/educated Greenlandic labour and the relatively poor public service level. In this debate, the 'Greenlandization rate' for the different professions in Greenland has been the subject of constant interest.

1 Section based on Andersen 2016 in Perspectives on skills
2 See Greenland Economic Council (2013) for a detailed account of the assumptions underlying these calculations.
3 Based on Ren and Björst 2016

The concept of 'Greenlandization' in the context of recruitment designates the percentage of the overall number of jobs within a certain profession which is held by individuals born in Greenland.
Over the years, the debates of Greenlandization have been conjoined with sensitive discussions over language, ethnicity and nationalism – which have made the topic even more controversial.
However, recruiting employees from outside of Greenland is extremely expensive and the workforce turnover is substantial. The massive resources wasted through constant work enrollment and replacements are some of the economic reasons why the inclusion and up-skilling of more people living in Greenland are of outmost importance.
Because of lack of research, no evidence can be offered of whether *bringing* capacities to Greenland (with the concomitant risk of wasting recruitment and retention resources) or *making due* with the current capacities is the most suited strategy for securing the Greenlandic workforce of the future.
As a consequence of this, the debate of more or less Greenlandization remains a political as opposed to a knowledge based topic of debate.

INDIVIDUAL EFFECTS

Informally acquired skills tend to be looked upon as less prestigious. Thus a better recognition of these skills could potentially lead to better selfesteem among the people possessing them.

From an individual perspective there will also be an increase in income from finding a job. A single person shifting from social assistance into employment will experience an increase in disposable income of about DKK 50,000, and in the case of disability pension the gain is about DKK 15,000. The higher the social transfer, the lower the individual gains from finding employment. This also points to a policy dilemma: The larger the transfers to serve social objectives and ensure proper living standards, the less is the individual gain from becoming employed, and the larger is the effect on public finances[4].

Inclusion into the jobmarket if a person's skills are identified as valuable for a job or if a person chooses to pursue further upskilling or even education, might also have significant effects on mobility which is both a societal and an individual effect. Especially for persons living in villages

THE NUIKI PROJECT

Important keywords are dialogue between stakeholders, local involvement and a willingness to take on personal issues. NUIKI began as a pilot project in the village of Itilleq. Courses with a focus on personal development as supplement to core curriculum subjects. The personal development course makes use of local resources or the closest next of kin outside the village. The board committee of the village, the school board and the prevention committee collabourate in order to coordinate social actions in the villages. The project takes place in the school's classrooms during the afternoon with trained teachers, using existing facilities. No need for new recruitments and no expenses/costs due to buildings etc. NUIKI's diagnosis is, that many education-attempts fail because personal problems are not addressed. Dealing with these problems often has a positive impact on the individual, the family and the whole society. Often helps reduce alcohol problems etc.

Project motto: Alright to have problems – not alright not to deal with them!
Some NUIKI students have been motivated to leave the village in order to develop further. They need continuing support – also at the "receiving end". Results: 80 % of participants in education or employed.
Has expanded to 14 villages and 200 participants[1]. More about NUIKI at www.nuiki.org.

1 Hymøller & Lennert, 2016 in Perspectives on skills.

4 Andersen 2016

or settlements. This is the experience from programmes such as NUIKI with the goal of up-skilling people without formal education. If participants choose to move to towns because of education or training opportunities NUIKI sees it as part of a more general societal development. Their goal is that as many people as possible get the tools they need to make informed decisions regarding their own future.

If a participant chooses to stay in the village after completing the course it is thus an active choice, and not because of the lack of other options. Children moving to bigger towns with their families is an expected consequence of the project and will lead to the children getting more options regarding education and training.

Another expected consequence is a general change of attitude towards education, which will lead to more people being encouraged to take an education despite the fact that one must leave the village.

4. LOCAL LESSONS

As a supplement to the formal educational system, Greenland has quite a few projects, initiatives and company-driven programmes aimed at preparing people with no formal education for employment or for entering the educational system. Some of these initiatives are specifically targeting the "residual group" of young people outside the educational system and not having a job. Some are focused on upskilling and some are more broadly focused on dealing with personal development with an element of formal education as well. The strategies as well as the goals of the programs vary– and so does their degree of success. However, there are a number of lessons to be learned from them.

EDUCATIONAL LESSONS

Historical events and different regimes of understanding and appreciation of knowledge have shaped the development of the educational system in Greenland[1]. A large part of modern Greenlandic history is heavily influenced by the relationship with Denmark. Even though Greenland has had Home rule and after that Self Rule since 1979 much of the present Greenlandic institutional structure has been more or less directly copied from a Danish system.

The consequence of this has been a tendency to miss out on possible benefits of including knowledge which is specific in a Greenlandic context. Available research points to the fact that TK, local knowledge and informally acquired skills might play a more potent role than is the case today – and that this inclusion might be a way to obtain an educational system which is better at exploiting the dormant skills and potentials of the residual group.

On one hand Greenland has invested massively in education since taking over the responsibility for education at the implementation of Home rule in 1979. One of the first reforms was the so-called Greenlandization of the elementary school system. The School Act of 1979 defined Greenlandic as the teaching language in all topics throughout elementary school. This presented a challenge to the schools because the number of qualified Greenlandic speaking teachers was insufficient to meet the demand. To some degree, that induced a de-professionalization of the school system leading to a high ratio of non-qualified to qualified teachers. In recent history, the Greenlandic educational system has gone through a string of reforms in 2005, 2012 and 2014 attempting to amend the low education rate but so far without the desired success. The reforms have gone from ambitious goals to less ambitious goals but they have so far failed to produce a holistic way of looking at education and jobs and to include both technical and psychological aspects as well as measures to adapt to specific Greenlandic conditions. This points towards a need for looking at both education and the use of skills in a new perspective.

On the other hand, due to limited capacity, the educational institutions in Greenland cannot accept all applicants for education. On top of that, a high percentage of those admitted fail to complete their education, for a number of reasons. The drop-out rate is up to 50 per cent for many educations . To understand these relatively high rates of drop outs from the formal

1 A thorough analysis can be found in Jørgensen & Hoffmann, 2016 in Perspectives on skills

PIORSAAVIK
Offers educational and activation programs for young people between 16-24 who are not yet ready for a job, further education or a course at Piareersarfik. The initiative focuses on practical upskilling through different workshops focusing on e.g. carpentering, cooking and needlework. The activities vary from one town to another and currently only Nuuk, Paamiut and Tasiilaq have such offers, while the Piareersarfik in Ittoqqortoormiit offers similar courses.

education system, it is necessary to take into account that many young people are facing various social and personal challenges, which affects their ability to attend their education full time and to finish it.

With respect to the social and welfare factors, the distribution of wealth within the Greenlandic society shows a high degree of inequality and some students including pupils at elementary schools are challenged by issues related to poverty in the family. In some villages and the bigger towns, lack of housing might result in limited space, overcrowded houses and apartments and lack of sleep: These factors can be detrimental to successful school attendance. In addition to social and cultural barriers there are significant geographical barriers that impede skill-building programmes.

Along with the social challenges these "technical barriers" are also a significant part of the explanation regarding the drop-out rates and the challenges for the formal educational system in Greenland[2].

Recent years have seen a blossoming of initiatives trying to meet these challenges in new ways. Initiatives such as Timi Asimi and similar programs target young people outside the educational system by focusing on outdoor activities leading to personal development and preparing the target group for job or further education. Often a formal goal for the initiative as well as for the participants is to prepare the young people for entering Piareersarfik. The Piareersarfik initiative is thus increasingly seen as an education in its own right within the formal education system.

Despite these efforts, the challenge of young people leaving school without the ability to enter further education or a job persists. This has paved the way for a new layer of initiatives preparing young people to enter a pre-educational or pre-job facilities, which would have been obsolete altogether if their primary school education had not failed.

TIMI ASIMI
Nuuk-based project for young people between 16-25 years – also activities in Tasiilaq in East Greenland. Established in 2011 with a goal of enabling young people to enter the education system or get a job. Focuses on outdoor activities, health and physical training as a mean of preparing for education, for example Piareersafik. Also a focus on personal development for young people with difficult personal backgrounds. Courses are between 6-13 weeks includes educational counselling and visiting companies. The latest report from the project said that between 2011-2014, 117 young people have been through a Timi Asimi course . In January 2016, 26 young people completed a course. 50 per cent started at Piareersafik after having completed the course. The municipality of Sermersooq is the main source of financing for the project. There is no continued evaluation of the project available. (Boolsen, 2016 and Timi Asimi webiste)

Initiatives such as Timi Asimi are innovative because they attempt to meet the wish for education by young children by means outside of the formal institutional frame and by addressing the issue of personal development. The projects

2 More on these challenges and ways to overcome them in Boolsen 2016 in Perspectives on skills

are however vulnerable because project success or project failure may depend on a single teacher or a single student. So far it has been difficult to evaluate the success of the projects relative to the resources invested in them .

Analysis shows that the successful educational projects integrate a "cultural dimension" in their work, whereas the unsuccessful projects do not[3]. If the cultural aspects are lagging behind, a serious consequence may be that the education policies will cement some of the inequalities in the Greenlandic population that they were designed to alleviate. In this respect many of the initiatives which are including a cultural – or a personal – dimension, are seen as successful because they have an innovative approach which does not necessarily accept the "western" or "modern" way of education and appreciation of knowledge. While these initiatives are successful in their own right because they create a sense of meaning for the participants which might not be obtained through ordinary programmes within the established school system - there are still many young people left without education or employment.

COMPANY INITIATIVES

For many companies in Greenland it is a challenge to maintain a stable and competent workforce including both skilled and non-skilled labour [4].
To solve this problem most companies in Greenland today employ people without formal education and people with special needs. This inclusion can be defined as CSR-initiatives, that is "the responsibility of enterprises for their impacts on society" according to the commonly used EU Commission definition from 2011. Employment of this category of work force often have components of up-skilling and further development of competences.

Towards the end of 2015, the organisation CSR Greenland interviewed 12 larger companies operating in Greenland, about their approach to inclusion of people without formal education in their companies and the challenges they faced when doing so .

Many Greenlandic companies have adopted a strategic approach to CSR focusing on 'creating shared value' for the company and society. Basically the idea is to look for areas where it makes sense businesswise for companies to engage in CSR activities that will also benefit society as a whole or benefit specific groups of stakeholders.

PISIFFIK – INTRODUCTION TAKES TIME

Greenland's largest privately owned retail chain with more than 40 stores in six towns, which in total employs 675 people. In all six towns where Pisiffik is present, there is staff working under **special arrangements** such as light duties or reduced hours.
Good collaboration with the municipalities: They often contact Pisiffik to explore possibilities for placing a person in the company and Pisiffik contact the municipality when there is an opportunity for a job with light duties. Pisiffik also offer **mentorship** for youth with no education, focused on giving the young person a new chance, show them the benefits of working and having colleagues. In some cases, what is needed is a solid daily **structure** and **support** to build up **self-confidence**. It is central to **spend the necessary time to assess the person's abilities** and ensure that there is a good **dialogue**. It requires an **introduction period** to get tasks, responsibility and work load right for the individual person, something the municipality often is a key partner in assessing this along with the need for additional support. This process **takes up significant management resources and support from colleagues**, and in smaller stores this can be challenging. Starting to work can be hard, and it usually takes time to adjust and adjust the job to fit capabilities.

3 Boolsen 2016 in Perspectives on skills
4 Chapter mainly based on Christensen 2016 in Perspectives on skills

The idea that CSR is about creating shared value can also be seen in the strong emphasis on partnerships between companies, public sector organizations and to some extent NGOs, aiming at solving specific challenges together within areas such as environmental protection, education, health etc. While partnerships are a typical feature of CSR initiatives, it is, according to CSR Greenland, uniquely widespread in Greenland.

The shared value, however, does not come for free. The companies in the survey often mentioned that although it seems like a possible solution it takes up a lot of time and resources to assess a person's skills and tailor the job to fit the person. Inclusion in general, the companies said, requires a great amount of resources from the companies in terms of time spent by the management and colleagues. But often it is an effort well spent: For some companies inclusion has lead to reducing costs and making better business. For the employee a job might make all the difference in daily life.

ROYAL GREENLAND (RG)
– focusing on training and personal development

RG is Greenland's largest company with about 1200 employees in Greenland - and one of the largest employers of people with no formal education. Significant emphasis is placed on the employees' **personal skills**. Colleagues often train new employees – also as continuous development. RG runs 'Royal Greenland Academy', a training program, focusing on personal development, **collaboration in teams and first aid courses**. RG is involved in projects focusing on the **work environment** in the Greenlandic fishing industry as well as a project on **work culture** in their production facilities. Both might inspire new approaches. RG also make use of people possessing traditional knowledge, i.e fishermen and hunters when exploring new resources such as sea urchins.

BASIC SKILLS ARE CRUCIAL

The challenges mentioned by the 12 interviewed companies often related to basic skills such as meeting on time and showing up for work consistently.

These basic skills need to be in place to build competence in the job and for employment to continue. Many of the companies also focus on development of other types of personal skills of the employees – some through specific programs working with the ability to work in teams, conflict solving, building up self-confidence etc.

BRUGSENI – STRUCTURING INCLUSION

One of the largest retailers with supermarkets in 7 towns. Employs approximately 550 people – many without formal education.

Brugseni motivates employees to engage in education, i.e as an adult **apprentice** and support employees who want to pursue **training or education**. It is a core element in Brugseni's CSR efforts to work with inclusiveness and diversity in the workforce. Since 2014, Brugseni has had an **added focus on inclusion** and motivating store managers to employ people with special needs.

Another challenge to be overcome is the need for specific upskilling regarding the tasks at each company. On-the-job training by colleagues/ mentor-ships or forming company programmes targeting areas such as language skills or safety are often used to solve these challenges. Even though many skills are very specific, there might also be skills that are cross-sectorial and companies might benefit from coordinating this work. Especially considering the fact that most of the larger companies in Greenland have the same owner – the Self Rule Government.

It might also be an advantage for employees without formal education if a cross-sectorial

system could be set up which recognizes the skills acquired through the different jobs.

A certificate which mentions acquired on-the-job skills, both personal and job-specific, which are widely acknowledged as relevant might serve as a quasi-formal certificate in the future for people who might otherwise have difficulties in entering the formal labour market.

Some companies mention a wish for closer partnership or dialogue with the authorities in order to be able to better their inclusion of employees without a formal education. While some experience a very close dialogue with the Municipality some do not.

ARCTIC UMIAQ LINE (AUL)– TRAINING LANGUAGE SKILLS AND CONFLICT RESOLUTION

Customers on AUL's coastal journeys include both locals using the ship as transportation between towns, and tourists using it as a combination of sightseeing and transportation. Most of the personel on board has no formal education. Employees are trained in **language skills** to improve communication with foreign guests, service training (front line) and conflict resolution. Courses are often offered during the winter season when the boat is sailing less. AUL also puts great effort into training managers to ensure a good working environment.

It has been prioritized to let the **service personnel participate** in making decisions of relevance to their day-to-day work. Along with this, the company has worked to make tasks for the service personel clearer and simpler. This makes working at the company more attractive and has helped AUL expand its recruiting base. Also, it has improved retention of personel. This reduces training costs, improve efficiency and help improve the customer experience.

BANK OF GREENLAND - SPACE FOR INCLUSION

Strong profile on CSR and has worked for many years on training and educating people in the organization. Unlike many other financial institutions, the bank will often **hire people with a short administrative training** and then support their **education to specialists**.

However, for Greenland's largest financial company,it is challenging to hire people with informally acquired skills as the vast majority of the banks functions require specialized training or education. The Bank of Greenland will in 2016 begin collabourating with Sermersooq Municipality to offer a trainee position for young people with difficulties entering the labour market.

ROYAL ARCTIC LINE (RAL) – AN EDUCATION PROGRAMME AND A DESIRE TO COLLABORATE

RAL operates shipping and harbour services in Greenland. The company tries to assume co-responsibility for integrating people with informally acquired skills.
However, so far RAL's experiences have been fairly negative due to difficulties in **collabourating** with the municipalities.
Actual experiences with young people starting to work in the company has unfortunately not been positive due to lack of **the right balance of expectations** between the young person, the municipalities and RAL. However, RAL is successfully managing **10 different education programmes for young people** ready for education. In collaboration with the 'Unemployment office', RAL recently interviewed 20 unemployed as part of an inclusion effort (people with informally acquired skills referred by the municipalities) to give them a chance in the company. Only one person is still employed. According to RAL this is due to lack of sufficient visitation from the municipality – the unemployed were not ready for joining the workforce.

The matter might be an issue for further investigation as to what is working and what is not.

CSR initiatives naturally take their point of departure in a company and the needs of the company. In order to fully use the potential of available skills in Greenland it might however be necessary to look at alternative approaches which takes its point of departure in a broader context.

5. MATCHING AND ACTIVATING SKILLS

There is not just one road towards a better use and recognition of informally acquired skills. Matching skills with existing or emerging jobs can be a way forward. Activating skills is another possible way.

Matching local skills with jobs can be a way of countering the flow challenge, a way to create growth in specific geographical areas and make sure that all relevant skills are activated and brought into play in the most efficient way for the benefit of the individual. These efforts have several target groups:

- People who already have a job but who might be able to activate informally acquired skills in their current job or in order to get another job.
- People who do not have a job but who might have informally acquired skills that could be matched with employment.
- People who have informally acquired skills but who might need upskilling and/or personal development in order to enter a formal labour market.

MATCHING SKILLS WITH EMPLOYMENT

The needs companies have for people with informally acquired skills vary greatly. Even though many companies in Greenland are very supportive of the idea of employing mainly locals, companies such as for example Air Greenland and the Bank of Greenland typically have specific technical and educational requirements for most positions and less positions that might be filled by persons with no formal education. Others such as retail companies (i.e. Brugseni, Pisiffik and KNI) and service providers such as ISS and Usisaat might better be able to absorb workers with only informally acquired skills due to the nature of the work.

The statistics on the division of the labour force into sectors provide interesting insight regarding the possibilities of including people with informally acquired skills. First of all there is a relation between a person's educational level and the sector in which they work. As shown in figure 10, the lower the educational level, the more likely it is to find work in the primary (agriculture, fishing, hunting, mining) sector. Often this is where people without a formal education will seek employment. As for now the fishing industry makes up for 93 % of jobs in the primary sector whereas hunting, agriculture and mining in total constitutes about 7 % as shown in figure 11.

The higher the educational level the more likely it is that a person will be employed in the public sector. Looking at figure 12 it is also quite clear that people living in villages/settlements are more likely to work in the primary sector. Finally, looking at figure 13 it becomes evident that the labour market is somewhat segregated. Almost 60 percent of the female labour force work in the public sector whereas for men more than 45 percent work in the primary sector. Hence, the conclusion is that in general men from settlements/villages are more inclined to work in the primary sector. Knowing that this type of jobs are disappearing it seems that a special focus should be on the group of men primarily possessing informally acquired skills.

Close relation between educational level and sector

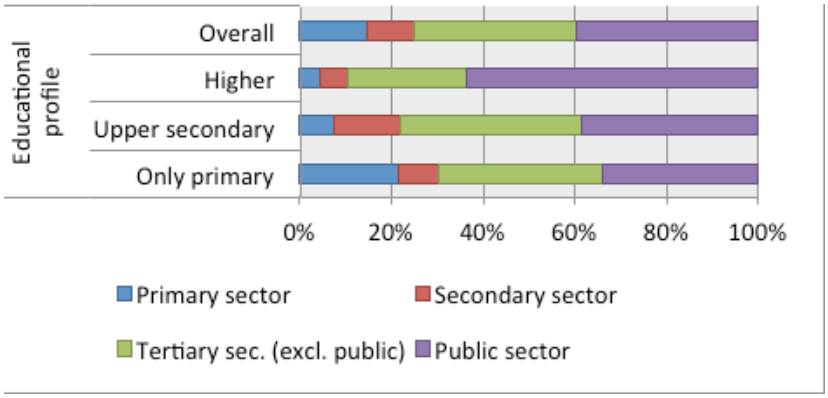


Figure 10: Distribution of main employment in different sectors according to educational profile, 2013. Source: Statistics Greenland

The primary sector is mainly jobs in fishing

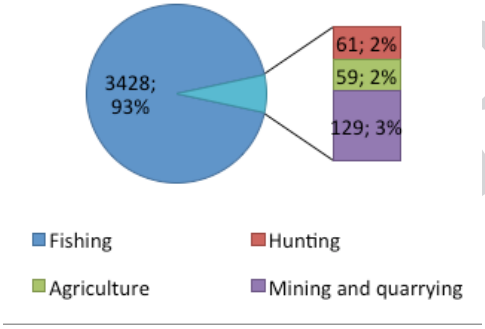


Figure 11: Distribution of jobs in primary sector Source: Statistics Greenland

Sector-difference between villages and towns

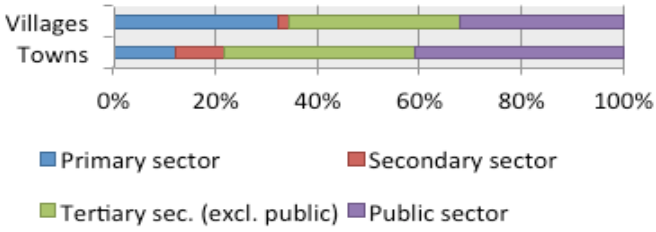


Figure 12: Sectorial distribution according to place of residence . Source: Statistics Greenland

The public sector is dominated by women

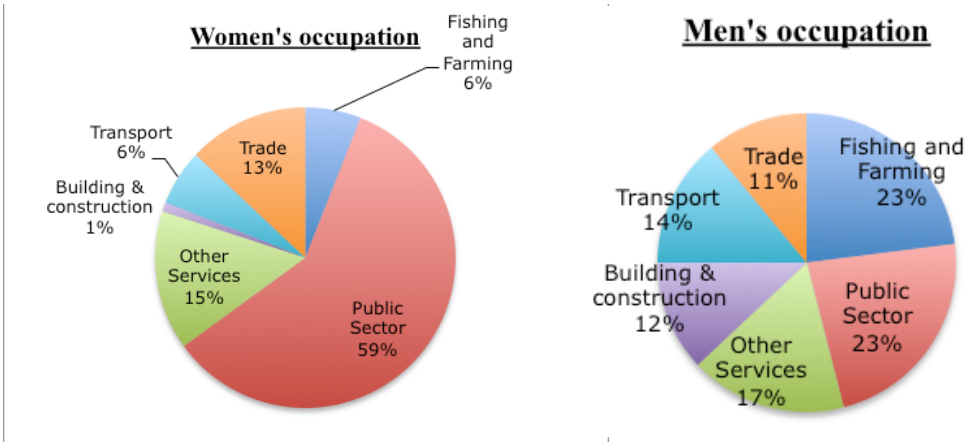


Figure 13: Distribution of jobs according to sex Source: Statistics Greenland

NEW INDUSTRIES EMERGING

Efforts are also made to make new industries emerge in order to create growth for society as a whole and maybe provide new types of jobs – so far with limited success.

There is however a consensus that the sectors most likely to produce future growth in Greenland and thus be in need of labour - skilled as well as unskilled - are the already existing fishing industry, deemed to be the most dominant sector in any foreseeable future and with a potential to develop new products and resources not used today – extraction of raw materials and tourism (with handicraft as a derived industry). Other sectors of interest in the future might be agriculture and greentech but for now they remain rather small.

It is not possible - nor the intention - to provide an overview of potentials in this report but the following gives a few pointers to future jobs for people without formal education derived from the anthology behind the report.

RAW MATERIALS

The extraction of raw materials can be roughly described as the extraction of oil/gas and minerals. In Greenland a mining industry is slowly emerging. So far a ruby mine has been opened, providing around 80 jobs – most of them local – and other projects are in the process of applying for different types of licenses.

The mining industry holds a rather large potential in terms of jobs for people with informally acquired skills[1].

In relation to extractive industries, TK may be relevant to environmental monitoring programs or as part of environmental and social assessment[2]. This is most often a mandatory and inherent part of the public participation processes of the assessments, which are based on voluntary participation by locals and can therefore not be viewed as potential job opportunities. Occasionally, however, baseline studies need to be conducted in relation to assessment procedures, where local hunters and fishermen may be relevant to include when, for example, identifying sites of ecological importance in an area and/or be helpful in the identification of solutions for the industry in relation to, for instance, potential and appropriate locations for tailings or waste rock.

FORTESCUE - A PROGRAM WITH A CULTURAL DIMENSION

The Australian mining company Fortescue focuses on including the aboriginal population and providing jobs. Has succeeded in employing and empowering indigenous individuals through their VTEC program with **a holistic approach**: Every individual recruited for a job is examined/interviewed to map his/hers whole situation including prior working experiences, family situation, need for rehabilitation for any forms of abuse, needs for qualifying courses or other needs like drivers licenses. A crucial aspect is that the individual recruited for a job under the program, accepts to follow a certain program with a mentorand is guaranteed a regular job once he/she has gone through the program. This has shown to be a major driver for success. Commencing in 2006, the program has helped more than 1000 people through training, support and employment. No prior training or knowledge is required before starting a program. Training sessions can be as short as one week or as long as a year, depending on the existing skills and education of the candidate.

Both TK and other types of informally acquired skills might be applied in logistics operations, catering and other functions related to the extractive industries.

Oil/gas in Greenland is yet to be found in commercially viable amounts but there are

1 See Kleist 2016 in Perspectives on skills
2 Merrild et al 2016, in Perspectives on skills

some active companies operating in North East Greenland[3].

Using traditional knowledge as part of environmental preservation and as a way of understanding the local ecosystem might be an option even though it will probably demand further training and upskilling[4]. The use of traditional knowledge as a supplement to scientific knowledge in environmental studies required for obtaining a license is gaining ground and is for example used by Shell in Alaska.

Moreover, there are opportunities during offshore activities such as seismic surveys and well drilling. However, being on an operating vessel also requires an understanding of the safety standards and ability to communicate with the vessel's personnel.

Direct job opportunities will relate to exploration, construction of offshore and potentially onshore production and transportation facilities, spill prevention and response, logistics, operations and maintenance activities. Working in the oil and gas industry does require education, albeit not necessarily high level education.

Offshore rigs do provide job opportunities for an unskilled or semi-skilled workforce, however even these functions require standard high school education and are therefore difficult to access for people who do not have any fomal education. Moreover, English proficiency or in the case of Greenland, Danish and English proficiency is often required to work in the industry. On the other hand there are also opportunities as the oil and gas industry will be facing a lack of skilled workers in the future.

In any case, the involvement of the private sector in defining skill development programmes will be essential to ensure a seamless connection between supply and demand of labour.

3 www.nunaoil.gl
4 Section based on Bertelsen et al 2016, in Perspectives on skills

TOURISM

If the tourism industry succeeds in expanding it could hold a rather large potential for employment for people without formal education. A new national strategy aims at doubling the number of tourist in Greenland by 2040 and at a substantial increase in jobs[5].

While the most obvious opportunities such as tourguide-jobs and the like might be attainable with basic "tourist" language skill training there are other derived jobs in the industry such as food production, crafts, hunting, fishing or logistics which might be of interest and relevance.

In tourism the local connection is crucial and thus holds a potential for involving people possessing informally acquired skills all over the country. What gives Greenland its appeal as a tourist destination is very much the connection between a unique nature and a population that has managed to adapt and exploit the potential that nature provides[6].
A locally based utilisation of these potentials can

5 National Tourism Strategy 2016-2020, May 2016, www.naalakkersuisut.gl
6 Hendriksen and Hoffmann 2016 in Perspectives on skills

generate jobs and a socio-economic contribution. At the same time the tourism potentials in Greenland are diverse and spread throughout the country with marked geographical differences as potential offerings.

Remote settlements are often an essential part of the attraction. The combination of resources and the specific location open up for new opportunities. An example could be a combination of local natural resources and tourism that exploits an increased global focus on catch-it-yourself and gourmet cooking.

Access barriers for sustainable tourism development are to be found primarily at the institutional level in a number of areas such as transport infrastructure and accommodation. But, there is also a great need for skill development - especially language skills[7] - which again points back to the institutional level.

An area where local or traditional knowledge is relevant, and might be applied, is in relation to Greenlandic archaeological heritage sites where previous and contemporary archeological research has involved TK[8]. The involvement has consisted in research collaboration, but has also proven valuable in terms of outreach and awareness among visitors with an interest in arctic and Greenlandic history.

Tourism in Greenland is an expanding industry, which is moreover, dependent upon land usage, local environmental knowledge and values in the course of international visits during both the summer and winter seasons.

In relation to tourism and cultural heritage, TK can be expected to feed into processes of site identification and can motivate definitions of heritage sites, cultural trails, geo parks etc., and can also contribute to tourist activities such as storytelling about local traditional use, history and culture of the land that surrounds relevant heritage sites. It can also be about identifying potential hiking trails, nature excursions and animal watch sites.

Skills related to traditional arts and crafts can similarly contribute to tourist activities, pedagogical workshops (such as sewing or weaving) and the production of traditional crafts or even foods that are of potential interest to visitors and tourists.

The work of cultural centres where themes and activities are based upon traditional knowledge practices have already gained widespread popularity among both visitors and arctic residents elsewhere in the region and might serve as an inspiration.

FISHING INDUSTRY

The fishing industry remains the largest industry in Greenland and employs a large number of people possessing mainly informally acquired skills.

In an attempt to maximize the income from fishing, there have been two converging trends[9]. First, a greater proportion of ocean fishing has passed to factory trawlers, which can perform processing on board, for which it is most profitable to sell directly to overseas markets without seeking port in Greenland. Second, a larger proportion of seafood is exported unprocessed for processing in low-wage countries such as China, Thailand and Poland.

The volume of unprocessed export varies, but has for years been approximately 60-70% for shrimp and up to 85% for halibut which constitute the two main exports. The overall development has meant that many of the towns and villages are now left without any real business or livelihood besides the maintaining of the settlement's operation.

7 This is also pointed out in the National Tourism Strategy 2016-2020

8 See Merrild et al 2016, in Perspectives on skills

9 This is further described in Jørgensen and Hoffmann 2016, in Perspectives on skills

Despite the fact that the number of jobs in the fishery sector in Greenland has been declining for the last few years, there are also examples of progress.

One of these examples is Royal Greenland A/S – a company owned 100 percent by the Greenlandic Government – which has succeeded in increasing the number of jobs in the last five years from 826 employees in 2010 to 1202 employees in 2015[1]. The company thus plays an important role especially in rural areas of Greenland.

USING INFORMALLY ACQUIRED SKILLS TO DEVELOP NEW PRODUCTS

One way of increasing sustainability is to develop new products. A project doing this is the Royal Greenland"Green sea urchin project". Sea urchin roe is a delicacy especially in Japan but Asia overall. The sea urchin is to be found from below the surface down to 300 m depth and is a species not utilized today in Greenland, neither by locals or commercially. Thus a trial fishery has been set upwith a crew of fishermen from a small village in North Greenland. One had an education as a catechist and the other one had no education. But they both knew how to sail the ship and to navigate and they knew how repair the ship when something was wrong.

Royal Greenland has a clear policy on CSR in relation to the overall development of the company in three interrelated and interdependent dimensions: financial, environmental and social development.

It is part of the sustainable approach that investments in the environment and social structures in the company and societies must strengthen the company.

1 Based on Ziemer 2016 in Perspectives on skills

ANOTHER WAY OF LOOKING AT SKILLS

If Greenland is to gain a fair share of the emerging (as well as the existing) industries and develop a sustainable growth scenario, it is necessary to involve local communities and their resources. This is also true if the Greenlandic people are to gain a fair share of the jobs following this potential development. Even if the current scenario was to continue it would be important to more efficiently match skills with employment.

Put very roughly, today there seems to be two different approaches to this matter: Those who believe that people in Greenland should adapt to the jobs – and those who believe that it should be the other way round[2]. However, alternative approaches seems to be emerging pointing towards the need for cross-sectorial collaboration, integration of economic, social and environmental sustainability and a need for activating the existing human resources, which can be found "at home"[3]. The latter also includes a different perception of the role of voluntary work.

SUSTAINABILITY, FLEXIBILITY AND BREAKING SECTORIZATION

When integrating economic, social and environmental sustainability a dispersed and small population is not necessarily a hindrance for development[4]. It is possible to utilize the informally acquired skills closely connected to the fishing and hunting areas that are still the dominant backbone of both the subsistence and export economy of Greenland. This perspective emphasizes the value of local knowledge (which *can* be the same as traditional knowledge but not always) and the need for the population to become involved in articulating and developing

2 More on this discussion in Ren and Bjørst, 2016
3 The following is largely based on Ren and Bjørst 2016, Hoffmann and Jørgensen 2016, Sejersen 2016 and Hoffmann and Hendriksen 2016 in Perspectives on skills
4 More about the integrated approach in Jørgensen and Hoffmann, 2016

a sustainable policy for society through participatory processes.
In remote areas this approach has in many cases lead to a more flexible job-structure and thus counter the so-called *sectorization* of the infrastructure that has characterized the development of Greenland since the late 1980s[5].

SECTORIZATION AND ITS CONSEQUENCES

An example which can describe the concept of sectorization is the organization of Greenland's infrastructure: Formerly all infrastructure such as food supplies, energy or transports in remote areas was taken care of by one single company: The Greenland Technical Organisation, which was developed to support the modernisation, and was during the Home Rule renamed Nunatek.

Today the infrastructure has been divided into a number of companies, wholly or partially owned by the Government of Greenland, each taking care of their own limited sector such as food supply, energy supply or transportation. The aim is that each company should optimize its services within their own core business and thus achieve greater efficiency and consequently savings.
This structure however does not taken into account the problems that this specialization will cause in a small society:

1) It leads to a natural sub-optimisation, where each company focuses on its core business and cuts functions that are not essential for this operation based on the philosophy that they could be bought cheaper from other actors - typically from the private sector.

CONSEQUENCES OF SECTORIZATION – EXAMPLE 1

In the spring of 2015, the ice stayed longer in the Disko Bay than expected. When Air Greenland's service contract with the Self Rule on helicopter flights in the district ended on May 1, Helicopter services stopped, even though Disko Line passenger ships were unable to dock at the ports. The consequence was that the passengers who were able had to walk out to the ship by the edge of the ice while the rest were cut off from any form of public transport.

CONSEQUENCES OF SECTORIZATION – EXAMPLE 2

In the fall of 2014 two different freezing technicians visited Qaanaaq one week apart to serve the city's freezing facilities that are owned by different sectoriarized companies. And in recent years, the city has not had an electrician because Nukissiorfiit has 'privatized' the electrical work, and thus has to commission an electrician from another city for every task. With Air Greenland's rates of fares to Qaanaaq, this becomes very expensive and usually requires a minimum of a week's stay.

2) A very large part of the Greenland island operation community, including most of the larger cities, does not have an adequate market for the existence of providers of such services. From a business economic point of view, the strategy of focusing on core functions makes good sense, but looking at it from a societal perspective this approach weakens a holistic use of resources.

3) Local knowledge is not activated or developed. Each company will employ their own experts and make their own specific structure instead of collabourating across the sectors.

This often means that specialists from the outside are needed whenever a problem occurs – and this increases the marginalization of locals in the area who often do not possess this degree of specialist knowledge. An increased sectorization thus creates significant problems for local business and for a local job market, as the different sectors and organizations' resources and skills are not coordinated and used effectively.

In a community such as Greenland, there

5 The issue of sectorization is developed in Hendriksen and Hoffmann, 2016 in Perspectives on skills

is obviously a need for people with higher education. But, because the population base is so modest and Greenland, furthermore, has a structure with many small island operation communities, there is an insufficient demand and it is not possible to finance as many specialists. For what can be broadly characterized as the vocational sector, there is a corresponding need for specialists and broad capabilities. In Nuuk and in a few of the major cities, there will be a need for real specialists in a number of trades, partly to cover the city's own needs and partly to reduce the need to call in specialists from e.g. Denmark, and who can also travel out to the coast and solve tasks there. At the same time, the nature of island operations means that there are a number of trades that in some way need to be represented in all districts.

FLEXIBLE CROSS-SECTOR JOBS

A solution can be to think across established sectors and domains of knowledge.

This is already being done in a number of areas, but the approach is often very local and not systematically described. There might thus be an unused potential in describing and expanding this further.

Most districts will be too small to employ, for example, a freezing technician. However, with some training, a mechanic or an engineer from the power plant can ensure on-going operations of the city's and the district's freezer, if the plants are serviced by a specialist at regular intervals. This will go a long way to ensure that fish or other products do not spoil and that great values are not lost. It will reduce the cost of the urgent commissioning of a technician.

Such a solution requires inter-sectorial collaboration in which, for example, the person employed at the power plant can also solve tasks for other companies or citizens for a fee. In many cases it will also require systematic efforts to upgrade the skills of different professions, so that they can work across different fields. In other cases, the skills needed might already be there – they might have been obtained in an informal learning setting – and might be possible to activate without an actual upskilling process.

It does however require an active decision and commitment from all of the involved companies. During 1980's an education as "village technician" was established, in order to meet the needs of the villages to actually have an all-round technician at hand permanently. The village technician would, when finished the education, have the basic skills in i.e. plumbing, electricity, constructions and alike. It seems that at the time the idea of having the companies cooperate and employ a "village technician" had limited success.

MAKING USE OF LOCAL KNOWLEDGE: COLLABORATION IS KEY

A better utilisation of the human resources in an area requires a relatively good understanding of local potentials and innovation. There are a number of resource persons in relation to, for example, the exploitation of living marine resources who know the local conditions and challenges and who also know of the when and how factors. If their knowledge does not come into play, it will be difficult to realise the local potentials whether it comes to the use of other species of fish, seaweed fishing, etc.

Around towns and settlements there are people who are vital for local development. It may be people with formal qualifications such as schoolteachers, health professionals or the government owned companies or those without formal qualifications like a local hunter or a hunter's wife. Regardless of their educational level these people often have important local knowledge and networking skills that enable them to spur on initiatives and cooperation.

An important point is however that the local population rarely are able to lift the burden of innovation or entrepreneurship, including the ensuring of the financial management of a newly created company. Consequently, too many possibilities are never realised.
Therefore, in order to activate the potential, it is

essential to ensure cooperation between the locals who have knowledge of local conditions, like experienced fishermen, hunters, sheep farmers, etc., and various forms of 'innovators', who will often have a higher education and come from the outside. Thus, news potentials can be created through the collaboration instead of "just" using the already existing possibilities in a given area.

LESSONS FROM HISTORY

The historic mining cases indicate that the social organisation of effective broker institutions to mediate and facilitate partnership between small and big businesses, between employers and employees and between "skilled" and "unskilled" individuals could be of paramount importance if the goal is to have local people and businesses prosper from the emergent market. These broker institutions may also function as capacity builders. With respect to social innovation, the establishment of broker institutions may be dependent upon new partnerships between businesses, NGOs and government. Social organisations of such a hybrid character can work as recruiters, facilitators, capacity builders, mediators and innovators and thus help fertilise an environment for enskilment[6].

ACTIVATING RESOURCES

While the "flexibility-approach" aiming towards a sustainable practice focuses on the potential in combining existing jobs and needs, another approach is the concept of *activating* skills and *shaping possibilities* in a so-called *situated approach*[7]. This approach also focuses on the need for collaboration between companies, authorities, families and even researchers using the local context, but skills are not seen as something which is already there, waiting to be activated, but rather as something new, which is shaped as a result of the collaboration.

An example of this approach is the Arctic Winter Games (AWG). Authorities, companies, individuals, organizations and researchers all participated in shaping not only the event but also new ways of collabourating and using local resources derived from the event.

This collaboration led to new ways of creating value and for many of the approximately 1700 volunteers at the event, AWG might have changed the way they perceive and use their own skills.

AWG used a strategy in which neither *skills* nor *jobs* took first priority, but were shaped in a mutual relationship and in close connection with the needs and resources on the ground.

As described by the General Secretary of the AWG "the development is not sustainable if the

ARCTIC WINTER GAMES - FINDING GOLD AT HOME

AWG 2016 was the biggest event in Greenland's history so far: About 2200 participants, delegates and press. About 1700 volounteers. The management of AWG sees the event as an instrument for *activating* the skills already present locally and not just bringing in from outside of Greenland.

This not only requires **discovering people's skills** but also the **ability to activate them in the right way**. AWG has offered a range of courses for volounteers. The understanding from the AWG secretariat on these matters is clear: AWG is "more than a sporting event". Approximately 600 people have completed different types of courses (language skills, first aid etc) throughout the project and a key mission within the project's strategy is to leave positive lasting footprints within society. A large group of **stakeholders** from companies to authorities and civil society was involed. An initiative has been set up to **create a database** of volunteers managed by the Municipality enabling **future contact and re-activation of volunteers** for other activities requiring volunteer help.

6 Sejersen 2016 in Perspectives on skills
7 Full article on this by Ren and Bjørst, 2016 in Perspectives on skills

people (living in Greenland) are not able to take the central jobs which will follow"[8].

Skills obtained through the planning and holding of the event by sponsors, volunteers and other partners could be used to benefit future public and business projects.
In this way AWG succeeded in entering daily life in a number of ways. Not only when the AWG actually took place but also through the yearlong process of planning the event.

During that time, connections were forged and requirements articulated through collaborative efforts of the event actors. Through collaborations with and between civic organizations, educational institutions, the art and music scene and others, new social and public–private constellations were enacted: Citizens as volunteers, NGOs as partners and companies as sponsors. In this way AWG did not just take place in sport arenas or at the AWG office. Capacities were not either 'outside' or 'in' Greenland, They were not by definition suited or useless, but *emerged in a context*.

In other words, in this approach capacities are identified as *locally situated*, and AWG is positioned as a catalyst to spark or activate these capacities through various collaboration and upskilling initiatives. While the outcomes and the long-lasting effects of the massive work initiated through the AWG remains to unfold and be evaluated, its work has already shown an alternative to universal upskilling and recruitment models. Instead, it has offered concrete indications of what situated up-skilling initiatives Greenland could look like. Such situated initiatives could be:

- highly **collaborative working across sectors**, across social, geographically dispersed and ethnic groups

- related to **local needs** and resources

- focused on creating many **different outcomes and values** for multiple stakeholders

- supported (or to some extent driven) by the **innovative use of digital and social media** resources

- to a higher or lesser degree **volunteer based**

This however, requires an understanding of upskilling as a constant process – not as a short term project or a terminal goal to be reached. A continued work could entail:

- Retaining and anchoring of **upskilling** activities and learning activities in relation to the event

- **(Re-) activating skill sets** gained and used at AWG2016 by volunteers, sponsors and other partners

- **Identifying events** in need of volunteers but also the possibility of identifying areas in need of "warm hands" e.g the children or elder sector, youth clubs etc.

- **Broadening the understanding of what constitutes an event.** Sports- and cultural events is just one option. Other types of events are conferences and the business tourism that this could possibly entail or it could be an even broader definition such as "fieldwork": Every year a rather large number of researchers come to Greenland to do fieldwork. These researchers will often need a range of services such as logistics, catering, guidance etc. A systematized way of approaching and benefitting from this recurring event might create jobs and be a way to activate skills.

- Develop a (digital) **infrastructure** to collect and bring together **volunteer resource**s

- Develop a (digital) infrastructure to collect and bring together AWG testimonies, innovation **business models and other collaborative efforts**.

8 A discussion on this approach can be seen in Ren and Bjørst, 2016

A VOLOUNTEERING CULTURE[9]

Greenland is often compared to Iceland and the Faroese. But where the key to strong local Faroese human capital seems to be quality local primary, secondary, vocational and further education combined with successful brain circulation, the Greenlandic society has not been able to follow the same path. It also seems that the fact that Greenland is a micro-state combined with island operation provides unique conditions for the development and organisation of a sustainable industrial base and skills. Thus it is often not relevant to compare the two countries.

However, there is one major factor which might be highly interesting to look more into which is the role of voluntary work and the culture of sharing which exists in especially the Faroese islands. In the Faroe Islands, a large part of the informal economy consists of traditional informal subsistence economic activity, such as whaling, fishing, agriculture and sheep farming.

However, other informal economic activity also flourishes, such as volunteer work (Salvation Army, Red Cross, and other NGOs) and many forms of unpaid cultural work (music, art, literature, and theatre). Furthermore, religious organizations outside the state church are often run by unpaid volunteers. This includes, the construction of new buildings that are completed by donations and unpaid labour (volunteers). Unfortunately, no statistics adequately capture the extent of the Faroese informal economy and its composition. The informal economy is, alas, informal.

However, the latest population Census (2011) provides some indication of the scope of the informal sector: Asked if they were doing any unpaid social work, 11% of the population over 15 year of age, answered that they were doing some kind of unpaid social work every week. More precisely, out of a total Faroese population of 37.965 people over the age of 15, 2.300 people reported doing less than five hours of social work per week, 1.100 between 5-14 hours per week and 680 people more than 15 hours per week.

The role of the traditional informal sector, however, should not be limited to the individual level and to how particular informally acquired skills can be formalised, or to how the informal sector can be incorporated into the formal sector to a greater extent. Rather, one could look at the informal sector as a sphere of society where social networks are created across economic class structures and social status, and where critically important 'weak ties' are formed. In other words, a key role of the traditional informal sector is to produce social capital. This social capital can be transformed into formal economic capital. However, even if it does not, it is valuable in its own terms.

Instead of asking how to include informal work experience into the formal economy, the question might be what role the informal sector has in creating stability and security in society as a whole. In the end, the formal economy will only truly thrive if society as a whole flourish as well.

When a Faroese employee leaves work to participate in a pilot whale hunt (grind), or leaves for the day to go sheep herding (reka seyð), it provides a reinvigorating breath of fresh air for people who otherwise are stuck in the "iron cage" of the formal economy, to borrow a term from Max Weber. Maybe the best way to draw on the informal sector is to let it flourish on its own terms and to acknowledge its importance as a glue that holds society together.

In the Faroese case, it is clear that the spirit of participation, cooperation and sharing, has been reproduced over time in the traditional informal economic sector while spilling over into other sectors and creating a diverse, cohesive and resilient society.

9 Section based on Bertelsen et al 2016 in Perspectives on skills

6. IDENTIFYING AND RECOGNIZING SKILLS

Being able to match employment with skills and to identify growth sectors who might be potential employers in the future is not enough. It is equally important to be able to identify who the people who might benefit from matching-activation,- or CSR-initiatives are and where and how can they be found. It is also crucial to be able to set up a system for recognizing and assessing the skills the target group - or the different target groups - have in order to be able to identify the right matches. Here, it can be fruitful to consult some of the availabe research on how a systematic approach can be set up.

IDENTIFYING THE TARGET GROUP

Initiatives targeting people with informally acquired skills can be relevant for both the group of people with no formal education and the group of people who have some degree of formal education but who might wish to include their informally acquired skills in their portfolio of competences. But who is it relevant to include in these initiatives? It might be that no education does not equal no skills. But on the other hand it must be acknowledged that not all people without a formal education possess "local knowledge" or informally acquired skills which are relevant for society.

The group of people in danger of becoming marginalized in their own society is diversified and in some cases growing. Young people and people in villages are an important target group - the number of young people not having a job seems to be growing. For the group of people who do not possess a formal education besides primary school, men seems to be more at risk than women, since traditional "men's jobs" in the primary sector are disappearing. Thus these are the natural but diversified target groups of possible initiatives.

Current research has yet to map these target groups in an "activation of skills" -perspective. This means that we are not sure that we know enough about these groups of people. What are their actual skills, where to find them and last but not least what their own wishes for participating on a formal labour market or in other societal contexts might be.

A task thus remains: To establish a systematic approach which help municipalities, employers, organisations and even family and researchers identify people who both possess the informally acquired skills and at the same time have an interest in using them for other or wider purposes than what they do today.

THE MATCHGROUP SYSTEM

As part of the attempts to identify the reasons behind unemployment in Greenland, a "match group system" has been set up. Each Municipality is responsible for identifying and categorizing their unemployed citizens into three different groups: 1) Ready to work, 2) Ready but with a need of further training and 3) Not ready, may need treatment.

The system is still fairly new and the indications of the different match groups are thus quite uncertain hence the difference between the Municipalities' own categorisation and the Ministry's estimate in the table. This uncertain categorization poses a challenge to the everyday

	Match grp 1	Match grp 2	Match grp 3	Undefined
Sermersooq	54,7%	17,6%	9,5%	18,2%
Qeqqeta	73%	18,5%	2%	6,5%
Qaasuitsup	77,9%	9,1%	3,4%	9,6%
Kujalleq	49,2%	8,6%	3,5%	38,7%
Total estimate	**35%**	**35%**	**20%**	**10%**

Table 2: Categorization of percentage of people belonging to the matchgroups by Municipality. Source: Employment strategy 2014-2014. Ministry of industry, Labour and trade.
Group 1: Ready to work, Group 2: Ready but need training, Group 3: Not ready, may need treatment

social work and also for the long term strategies regarding unemployment.
Some have suggested that a special focus might be needed regarding young people outside of the systems. They are often a difficult group to reach because of the lack of understanding of their general life situation and their point of departure. To establish a task force reaching out to young people and finding them where they are - even if it requires to find them at nighttime - would require an amount of resources and manpower that the Greenlandic Municipalities do not necessarily have today. An efficient task force drawing on local knowledge to be set up for a longer period of time would thus probably require a stable external funding resource. Using the already established Piareersarfiit system to identify groups in danger of marginalization could be a first step.

The research cited in this report suggests that a tighter and more cross sectorial way of identifying both relevant skills and people possessing these skills could be a way forward. A task force involving relevant stakeholders could also be a road towards a better inclusion of local knowledge in specific areas and thus lead to new ways of solving local problems.

RECOGNIZING SKILLS

International documentation[1] suggests that the population group that are most at risk of unemployment is early school leavers, precisely, because these do not own a qualification of value for the labour market (from the initial education and formal training system). In this context, the so called Recognition of Non-formal and Informal Learning approach (RNFILO) is of high interest to policy makers in order to identify people who have acquired competences in their life outside the education and training system. Recognition of Non-formal and Informal Learning Outcomes target the non-qualified, or lowly qualified yet competent individuals; it aims at making visible the learning outcomes that individuals have acquired from any type of activities, including informal ones. Recognition of Non-formal and Informal Learning Outcomes is particularly adopted in countries with a large competent but unqualified workforce.

Unlike what might be anticipated, RNFILO is not meant for individuals with no competences at all . It is important to be aware of the fact that RNFILO is not an educational system and thus there need to be a competence base to build on. The system is made to uncover invisible competences which lies outside of the formal educational system. If one assumes that the talent of an individual is uniform among all individuals regardless of the opportunities they have had of attending school on a regular basis, but is hidden, then, countries will be deprived of a potentially huge reserve of human capital when this talent goes unrecognised. If the learning that takes place in the informal economy is not recognised, then, the penalty is doubled: individuals do not have a decent job and the investment – in time and money – in learning activities is lost .

A key issue is therefore to organise the

1 The following is based on Werquin 2016 in Perspectives on skills

pre-screening process so that applicants with actual competences are invited to apply for assessment and for validation/recognition. Most countries have opted for a condition of eligibility that demands that applicants must have three years of experience in a field that is relevant to the qualification which is aimed at.

This is notoriously insufficient in order to address the needs of early school leavers, for instance, and more individual approaches need to be developed.

The best way to describe Recognition of Non-formal and Informal Learning Outcomes is to say that it is another route to achieve a qualification; either directly through the awarding of a qualification on the sole basis of an assessment, or indirectly through the awarding of credits, or the facilitation of access to additional education and training through an exemption of academic prerequisite for access and/or an exemption of all or part of a study/training programme.

Inspiration of how to establish a RNFILO system can be drawn from international experience where there are almost as many systems as there are countries[2].

What usually makes the differences is:

- Whether countries accept to validate learning outcomes from the labour market or from private activities, or both.

- Whether countries may award the full qualification at the end of the validation, or whether it is merely a right to sit for an examination in the formal learning system.

- Whether what is awarded (qualification, credit or exemption) is fully accepted in society, and first and foremost by employers.

This last point again calls for the need of gathering labour market stakeholders in order to agree on which informally acquired skills to recognize and how it should be done across sectors. The need to agree on a system also points to the importance of assessment. Assessment is at the core of any Recognition of Non-formal and Informal Learning Outcomes approach. Since, the input process is unknown, what matters is whether applicants are competent and only a thorough assessment process may establish that.

RNFILO methods are diverse, depending on the conditions of each country. Even though the conditions in Greenland differ from other

EUROPEAN NETWORK ORGANISES SECOND CHANCES

The European Association of Cities, Institutions and Second Chance Schools (EC2) is an example of an international network organisation in the field of teaching or enabling young people with lack of skills or qualifications to successfully gain access to education programmes or to the labour market. The Association is an independent non-profit organisation and was legally established in Heerlen (The Netherlands) on the 4th of June 1999.

The main goals of the Association are to:
- organise exchange and transfer of experience between the cities and collective territorial bodies who have set up or participated in setting up a Second Chance School within the framework of the programme launched by the European Union
- assist cities and collective bodies who wish to set up a Second Chance School
- promote the European concept of Second Chance Schools in general.

More at http://www.e2c-europe.org

2 International examples are based on Werquin 2016, in Perspectives on skills

countries in many ways, there might still be inspiration to find:

MODELS FOR SYSTEMATIC RECOGNITION

Some typical ways of systematizing RNFILO are:

- Awarding second chance school certificates. This is the case in the USA, with the General Education Diploma (GED), or in Mexico where the Bachillerato may be achieved through Recognition of Non-formal and Informal Learning Outcomes. In these countries, the adult education system is referenced to the school system (Canada, Norway, Chile, or Spain).

- Exemptions from formal programmes, as in modular tertiary education programmes, with exemptions available, and specific credits; and with university discretion over exemptions. (Dutch-speaking Belgium, Canada, Chile, Hungary, South Africa and UK).

- Awarding of a labour competence certificate, for direct access to the labour market. Those certificates are not registered in the National Qualifications Framework/Catalogue. Those are exceptional procedures to allow those with established competence to gain a certificate with limited recognition but recognised by a Branch, an Industry or a Company (Dutch-speaking Belgium, Chile, Germany, Netherlands and South Africa).

- VET system redesign, with the creation of RNFILO-friendly qualifications; i.e. qualifications that do not impose specific internships or classroom based learning (Australia, Hungary, Mexico, Spain and UK)

- Certificates, for instance for language certificates, certificates awarded by professional bodies or even the European Computer Driving License (Canada, Greece, Germany and Hungary).

Many of these systems aim at balancing between the need to activate people with no formal education and the need to still encourage people to engage in further education. Formal education remains the straight way to a formal job, but at the same time there is a need to acknowledge that learning outside of the school system also represents a value – and to acknowledge that not all people have an interest or the capacity to become a part of the formal educational system.

POSSIBLE BARRIERS

Systems of Recognition of Non-formal and Informal Learning Outcomes that have been established around the world are usually quite successful, but the take up remains small. Success stories show the value of the approach, but countries often find it difficult to scale up.

A possible explanation for the modest success is that most applicants – after the RNFILO-ready applicants have been successfully assessed and qualified – need additional education and training. These applicants see most of their learning outcomes validated, but they do not fully meet the expected standards.

They therefore need additional learning outcomes before they can be fully validated. However, few systems are organised in such a way to offer education and training so that learners can acquire specific learning outcomes.

In other words, education and training are not adequately modular for unsuccessful RNFILO applicants to select the education and training that they need in order to achieve just a few learning outcomes. The future of a general approach to Recognition of Non-formal and Informal Learning Outcomes lies in a revisit of the formal education and training system with the aim of making it more flexible, so that learners may choose precisely what they need to complement their existing competences.

7. FOCUS AREAS

This report has focused on describing informally acquired skills and how they might fit into emerging industries as well as becoming recognized by the existing in order to become an asset for society as well as an active asset for the individual. The following focus areas have emerged from working with the report, the chapters of the anthology and from dialogue meetings with different stakeholders within this field.

We have found that there is a large group of people in Greenland who are not part of a formal labour market or enrolled in education. We have also found that there is a great potential in transferring these people from social welfare into jobs. The group is diversified when it comes to age, sex and geography and it will not be possible to make a "one-size-fits-all" system across the great differences between the potential target groups.

The formal education system accepts 30-40 percent of those who wish for a further education in Greenland and the dropout rates are very high. At the same time too many young people experience that their exams from primary school do not allow them to continue further education and they need to be upskilled through the Piareersarfiit system. This situation combined with a high level of unemployment has led to a significant expansion of Piareersarfiit in the last few years. At the same time there are bottleneck problems and labour is brought in from other countries. Thus we conclude that the existing education- and employment system in Greenland has shown some limitations regarding the ability to include people without a formal education. A range of CSR initiatives are already functioning but there is a potential for more and for other types of efforts.

The reasons behind the current situation are various but the different types of research behind this report points towards the fact that there could be a potential in looking at informally acquired skills and the way they are perceived in a new way.

This could be a broader way of activating skills - and to include volunteerism in sectors in need of hands, it could be better inclusion of the specific Greenlandic conditions in the planning of education and employment, it could be a cross-sectorial approach, it could be a focus on a sustainable development with inclusion of both economic, social and health aspects and it could be discussion about what constitutes a good life in the eyes of the target group.

In order to pursue some of these goals it will be necessary to gather relevant stakeholders to identify which informally skills could and should be recognized and certified and also to "map" to people possessing these skills.

The following 8 concrete focus points can be identified.

1. FINDING THE ANSWERS WITHIN

The report has shown that there is a potential in find answers within the Greenlandic context by looking at human resources of the country in a holistic and systematic way. Taking a point of departure in the country's own resources and specific culture and conditions might be the road to a more sustainable development. There is a potential in activating human resources in connection to events in a very broad sense as a catalyst for activating skills. Sportsevents, festivals, researchers' fieldwork, summercamps, cultural events, annual environmental clean-ups, just to mention a few opportunities, which could be seen as occasions suitable for activating human resources. There is also a potential in a more flexible approach to competence portfolios, especially in remote areas, where local and traditional knowledge might be used more systematically in a collaboration across sectors. Finally there seems to be a potential in activating volunteer resources as part of a constant up-skilling process as well as a way to support sectors in need of hands.

2. TEST OF ACTUAL POTENTIAL

The papers, on which this report is based, suggest that there exists a considerable societal potential in the informally acquired skills in Greenland. There is a strong need to verify that the group who are presently outside the work force and not enrolled in further education will benefit from better visibility and certification of their skills. Likewise, quantification of the socio-economic potential of matching these skills with existing and potential demands for the workforce is essential for allocation of resources to these efforts.

3. MAPPING OF SKILLS – ACROSS SECTORS

In order to match the potential work force with the potential opportunities there is a need for a geographic and demographic mapping of the distribution of skills and the size of the potential work force possessing informally acquired skills. Indications can be found in the current statistics but there is a need for a specific focus on informally acquired skills. This will require a division of informally acquired skill into a small set of clearly defined categories, deemed to be relevant for future opportunities. All relevant stakeholders (companies, authorities, unions etc.) should be included or at least consulted in such a mapping process to make sure, that the identified skills are generally accepted as being relevant for society.

4. A SYSTEM OF RECOGNITION

If the test of the actual potential and the mapping of skills succeeds, these steps could be followed by establishing a system for recognition of informally acquired skills addressed at the group of people who are not inclined to pursue further education. Our findings show that there is a wide acceptance and experience with inclusion of people with informally acquired skills, but initiatives and practices are often local and not systematic. This recognition could be systematized through certificates, "on-the-job-tests" or light assessments. Again, it will be a task for the relevant stakeholders to identify the right means of such a system.

5. CLEAR DEFINITION OF CAUSES OF UNEMPLOYMENT

A prerequisite for any focused actions to minimize the level of unemployment and disengagement in education is a clear definition of their causes. There is a need to address social and health causes, lack of visibility and appreciation of informally acquired skills, and lack of work opportunities that match these skills as three separate causes. They require different actions, and may act separately or in concert. We suggest that these causes be defined individually and their geographic and demographic distributions are mapped and registered separately. A match group system already exists in Greenland, but there seems to be a need for

standardization and more specific definition of the groups

6. A HOLISTIC APPROACH

The need to address personal challenges and the development of personal skills is underlined in much of the available research. Some of the existing preparation- and upskilling programs in Greenland are already including efforts to deal with this challenge and our findings indicate that this is a justified approach which could be included in even more programs. A holistic approach also includes an awareness of solving "technical constraints" such as lack of housing for students and interns and the lack of internships. Thus a mere focus on employment or education cannot stand alone.

7. DIALOGUE AND FOCUS

Addressing the potentials of including informally acquired skills in a systematized way might in itself be beneficial because it can help provide a focus on the challenge. This focus should be followed up by establishing a more stable and continuing dialogue between municipalities and companies on how to match relevant skills with relevant employment or other types of occupation. Our findings have pointed towards the benefits of a "broker" institution and at the same time companies have pointed to their wishes of a close collaboration with municipalities and contact persons on possession of the needed local knowledge to match people and jobs.

8. DEFINITION OF GOALS AND OBJECTIVES

Informally acquired skills can contribute more actively to development of the Greenland society. A crucial first step is to discuss and define a vision and decide on the objectives. Appropriate

policy strategies can only be designed on the basis of a clear vision. At the same time the creation of more tangible ideas about how future family life can be interwoven with work life in new trades and industries can be a decisive and creative mover for personal engagement in skills development.

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