

The Numeracy Framework for Adults—Learning at the Workplace: The Programme for Basic Competence in Working Life

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On behalf of the Norwegian Ministry of Education and Research ,Vox runs the Programme for Basic Competence in Working Life directed towards developing basic competence for employees and would-be employees. The idea is to fund and monitor basic learning projects in enterprises.

The programme concentrates on literacy, numeracy, and information, computer and technology (ICT) skills. Any enterprise in Norway, private or public, can apply for funding from the programme. The programme started in 2006. For the second programme year, 20 million Norwegian krone (NOK) was allocated to 70 enterprises, and in 2008, 25 million NOK was granted to 78 different enterprises.

The Norwegian Ministry of Education and Research has approved the new framework for basic skills for adults, comprising literacy, numeracy, ICT skills and oral communication. Vox was responsible for developing the framework.

The funding of projects within the Programme for Basic Competence in Working Life presupposes that the learning activity is based on this framework. Of the 78 courses that received funding in 2008, only three were numeracy courses, and two were numeracy courses in combination with literacy. Vox is responsible for following up and supervising some of the projects we support financially. The purpose is to create pedagogical and motivational models. In my paper I focus on three of these projects, supported in the 2007 funding.

The first one is a numeracy-literacy-ICT-skills project. This project focused on recruiting “drop-outs” to attend basic skills training and simultaneously providing job training opportunities for the participants within processing industries. The aim of this project was for the project participants to sign apprentices’ contracts. In order to attain the final certificate of completed apprenticeship the learners have to solve problems involving mathematics. This implies that numeracy had an important place in this particular project.

The second project is to create a pedagogical model suitable for adult immigrants who work as cleaning personnel in Bergen Municipality. These learners have little school experience and have quite poor language skills in Norwegian.

The third project is to create a pedagogical model for workers employed in a builders’ supplies/DIY centre in Bergen.

The Framework for Basic Skills

Background

The results from the ALL-survey (Adult Literacy and Life Skills Survey) prompted Norwegian politicians to take initiatives to enhance the level of basic skills in adults. According to the ALL-survey as many as 10 % of the Norwegian adults score at what ALL defines as level 1 in numeracy skills. Around 30 % are defined as level 2. The proportion of adults scoring at the desired 3, 4 and 5 levels is quite low (60 %) (Gabrielsen, Haslund et al. 2005), pp. 21–22). Even though one can argue that the Organisation for Economic Co-operation and Development (OECD) exaggerates when defining the numeracy level needed in order to manage tasks in today's labour market and everyday life, the results from the ALL survey indicate that there is a need for numeracy training for adults. The task for Vox was to establish a framework of competence levels, recognizable as a part of the curricula for Basic Skills established in Norwegian Primary and Secondary School, but adapted to the needs of adults.

The framework for basic skills is divided into three groups of competence targets at three levels for literacy, numeracy, ICT skills and oral communication. The three groups of competence targets in numeracy correspond to three main topics: numbers, measuring and statistics (probability is also included in addition to statistics at level 3. To show where the framework can be applied, each level is exemplified according to three arenas: private life, working life and education and training. There is an English translation of the numeracy competence targets.⁴

The Programme for Basic Competence in Working Life

The programme is directed towards developing basic competence for employees and would-be employees. The idea is to fund and monitor basic learning projects in enterprises and for people not presently employed. The programme has been up and running since 2006⁵, and it concentrates on literacy, numeracy, and ICT skills. Any enterprise in Norway, private or public, can apply for funding from the programme. For the second programme year, 20 million NOK (approximately 4 million USD) was allocated to 70 enterprises, and in 2008, 25 million NOK (approximately 5 million USD) was granted to 78 different enterprises. The funding of projects within the Programme for Basic Competence in Working Life presupposes that the learning activity is based on the frameworks for basic skills.

Although the initiative has raised considerable interest, it is a fact that the Norwegian effort in supporting basic skills training at the workplace is not as substantial as the funding in many other countries. New Zealand, for instance, has approximately the same size and population as Norway and they will support basic skills training at the workplace by \$NZ160 million (approximately 110 million USD) over the next four years. Their aim is to raise workforce literacy and numeracy levels by progressively increasing awareness of employers and employees about the importance of literacy and numeracy, increasing

⁴ www.vox.no/english.

⁵ <http://www.vox.no/templates/CommonPage.aspx?id=2601>

the number of learning opportunities that include literacy and numeracy and ensuring that these learning opportunities are high quality⁶.

1. *What kind of financial obligations do the enterprises have when they get money from Vox?*

An enterprise will normally get from Vox only part of the funding they need to run basic skills courses. The money can be used to outsource the teaching activity, buy teaching materials, support travel cost for the learners to attend gatherings and hire premises to run the courses.

It is a prerequisite that the enterprise supports the courses by activities such as promoting the courses, setting aside time to test their employees' basic skills, take care of all administrative obligations connected to running the courses and making the necessary rooms available in their own premises. It is also quite common that the enterprises run parts of the courses within working hours. These activities are recognized as the enterprise's own contribution to the budget, which can amount to 20 to 40% of the total.

2. *Why is numeracy always lagging behind literacy and ICT skills as for participation rates?*

Adults don't put mathematics into practical use today compared to what they did a few years ago. Maths has become a hidden world: we receive our salaries directly into our bank accounts, we pay our bills via the Internet, when we shop we pay with our credit cards. We do not even have to count the money we have to pay, or the money we receive in return if we pay with cash. The income tax return form is already filled in when we receive it. We can just check it and return it via the Internet. We can buy soft drinks, chocolate etc. from machines that pay back the change automatically. When we are shopping, we don't have to do the measurements we used to do. As a result of this technological development adults seem to lose their calculation skills. "If you don't use it you'll lose it". (Berg, 2006, p. 78).

The above mentioned factors may explain why many adults don't understand the importance of learning numeracy. During the years *The Programme for Basic Competence in Working Life* has been up and running it has been more difficult to promote numeracy courses as successfully as literacy and ICT skills courses. This seems to be the case in other countries as well. For example, in Denmark only one fifth of all basic skills training courses deal with numeracy⁷.

Adults with little formal education do not see the need to improve their numeracy skills. They regard their numeracy skills as good enough to manage demands they face on a daily basis (Lundetræ, Babrielsen et al., 2006, pp. 45–49.) Such results have also been

⁶TEC. (2008). "TEC launches literacy and numeracy action plan ", from <http://www.tec.govt.nz/templates/NewsItem.aspx?id=3624>.

⁷EVA (2005). *Evalueringsrapport Forberedende voksenundervisning. Forberedende voksenundervisning. D. Evalueringsinstitut. Copenhagen, Danmarks Evalueringsinstitut: 18.*

confirmed by the second Vox Barometer⁸ 2007 “Befolkningens holdninger til opplæring og egen kompetanse” (*Attitudes to training and own competence in the population*). The survey showed that the respondents with the lowest education were the least likely to participate in any kind of training. The main challenge to get them to come to basic skills classes is their lack of interest. Another interesting result from the same survey was what the respondents within this group regarded as the main obstacles to participating in further training and education: lack of financial support, lack of adequate training, and the management not providing sufficient opportunities for the employees. It is also within this educational group that most adults respond that their unwillingness to participate in further training is caused by a general lack of ease in learning situations and by having had negative school experiences. (Bekkevold, 2007, pp. 66–67).

In the opinion of the Vox staff, the above-mentioned factors are circumstances worth paying attention to when approaching the learners who will attend numeracy courses for adults. And this is especially the case for learners who start a course at the lower levels.

3. *What motivates adults to come to numeracy classes?*

NRDC’s research report ‘*Beyond the daily application*’:making numeracy teaching meaningful to adult learners has interesting findings on which factors motivate adult learners to come to numeracy classes. According to this research report, the main triggers are: succeeding in a subject where learners have previously experienced failure, helping their own children, understanding, involvement and enjoyment, and getting a qualification for further education (Swain, 2005, p. 86).

Teaching becomes meaningful when it is linked to an individual’s purpose. Very few learners understand that enhancing their numeracy skills will help them to better cope with the demands of everyday life. This underlines how important it is to find relevant teaching materials for learners. In some cases this might be the maths they need to prepare for an apprenticeship program which may include some school like mathematics and sometimes it will be motivating to work with numeracy tasks connected to workplace like or everyday life situations.

Monitoring projects

The teachers who teach courses supported by the *Programme for Basic Competence in Working Life* often have limited experience in teaching at the workplace. We therefore wish to have an impact on how teachers teach basic skills to employees at the workplace. Vox has developed a framework for further education for teachers. Since Vox is responsible for following up and supervising some of the projects we support financially, we want to try out some of our pedagogical ideas. Learning from the projects, we aim to design innovative pedagogical models. We also want look at what is being done to recruit adults who have dropped out of school, to get them to attend and stay in basic skills

⁸The Vox Barometer is a nationwide biannual, quantitative survey monitoring the basic skills situation in the adult population in Norway

training. Documentation about these models will be published on the Vox website in late 2008 or early 2009.

In this article I present three case projects. The first project focused on recruiting “drop-outs” to attend basic skills training and simultaneously providing job training opportunities for the participants within processing industries. The second project’s aim was to create a pedagogical model suitable for adult immigrants who work as cleaning personnel in Bergen Municipality. Some of these learners have little school experience and have quite poor language skills in the Norwegian language. The third project tested a pedagogical numeracy model for workers employed in a builders’ supplies / DIY centre in Bergen.

The Xtrata Project: Motivating Dropouts

Project Stakeholders

Involved in this project were Xtrata Nickel, the Norwegian unit of a multi national enterprise producing nickel(2008), the Vocational Training Office for Technology in the Vest-Agder region, and the local office of the Norwegian Labour and Welfare Administration and a teacher for special needs.

Challenges and Provision

It was important to find relevant locations for job training and suitable premises for basic skills training. It was also important to give the project participants some financial support. Nine were recruited. They were picked by the Educational Office for Technology subjects in Vest-Agder in cooperation with the local office of the Norwegian Labour and Welfare Administration who also supported the participants financially. Each apprentice received 5500 NOK (approximately \$1100) per month to cover personal costs during his training, and was refunded for transportation costs.

The Vocational Training Office for Technology played an important part in the recruiting process. Each potential project participant was thoroughly examined in order to find out if they were suitable. Their willingness and motivation to change their lifestyle was crucial. We have to keep in mind that they had dropped out of vocational education. When the project participants were picked, they were carefully interviewed in order to find relevant job training within the processing industry. The office is in close contact with all the relevant companies in the area. This is crucial in order to place the project participants in relevant job training. The project participants’ school reports showed that they had often been absent from school and their grades were poor and they had even failed to pass some of the subject exams. Thus the selection process played an important part. The Educational Office for Technology subjects in Vest-Agder vouched for the project participants’ character and motivation when they were placed in companies.

Total Training Period: 12 weeks

Basic skills training in literacy, numeracy and social science met for one day a week. Job training in the processing industry met four days a week.

Issuing Partial Certificates, a Viable Strategy for Drop Outs?

A recent research study of statistics gathered in seven counties in the south-east region of Norway provides interesting information about the target group of the Xtrata project. This survey examined how well approximately 10 000 learners who graduated from secondary school in 2002 did. In 2007 only 2/3 of these learners had achieved a university admission certification or a certificate of completed apprenticeship, which are both the results of a completed secondary school education. This implies that 1/3 dropped out of Upper secondary school.

Why did they fail to achieve the desired certification? The reasons vary, because drop outs constitute a complex group of learners. For some of them the problem was the theoretical subjects such as Maths, Norwegian and English. Some may have failed at only one subject, others may lack many. Some simply quit school (Sandberg, Lødding et al. 2008).

Youngsters that failed to pass all their exams at secondary school level may lose motivation and self-confidence. Given a second chance, some of them will manage to pass all their exams. For others, however, the challenge may prove daunting. The possibility of achieving at least a valid document that shows partial competence can be of great importance as a motivation for further learning and development. That is the reason why we need to focus on basic skills, including numeracy, for this particular target group, and it is also the reason why “competence cards” were integrated as elements in the project.

A full certificate of apprenticeship for adults is handed out when the candidate has fulfilled all competence targets for a specific profession/trade. A competence card can be achieved if a candidate has attained some of the competence targets or parts of the competence targets for a specific trade.

The main aim of the project

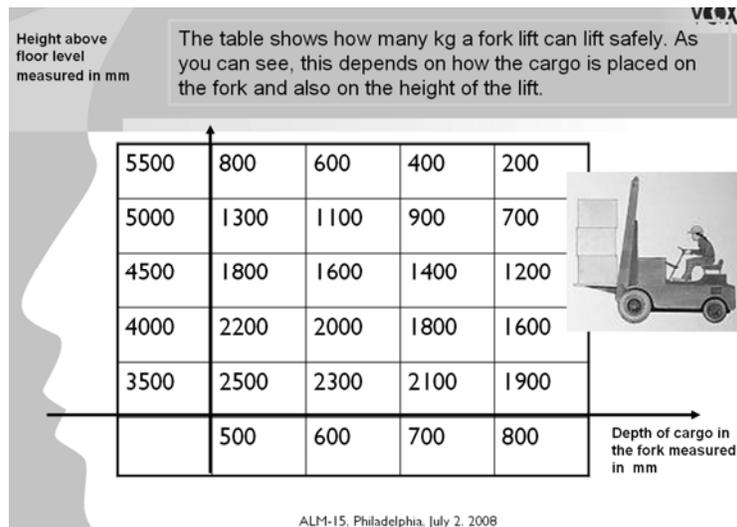
People who drop out of school often adapt to a certain life style. E.g. they sometimes keep strange hours and they may have lost confidence in their own abilities to be part of the workforce. Thus an important issue for this project was rebuilding their confidence and preparing them for the demands of working life and further education. These are the demands that the participants meet on a daily basis in work training and schooling. The measurable outcomes for the participants of the project were: sign apprentices’ contracts or limited apprentices’ contracts. In order to attain the final certificate of completed apprenticeship the learners have to do mathematics. As we have seen from the examples, functional numeracy is an important part for all employees within the processing industries. This is why numeracy played an important role in this particular project.

Pedagogy—embedded learning⁹

During their job training sessions, some of the participants learn to operate a fork lift. This requires understanding a safety table for fork lifts; heights and weights. Understanding transitions between units such as millimetres (mm), centimetres (cm), meters (m) and kilograms (kg) and grams (g) and so on.

In one of the numeracy lessons we observed the project participants worked with transition of units such as converting m to cm, cm to mm and tons to kg and so on. This formed the basis for understanding the safety table for a fork lift which was an important part of the lesson we observed. During the basic skills training the teacher tried to work with authentic teaching materials which was recognizable for the project participants' work tasks. During work training most of the project participants have to relate to working drawings. Therefore, the teacher used working drawings during numeracy classes. During the 12 weeks of training the teacher also focused on topics such as calculating salaries, renovation and percentages in connection with salary increase, tax and mortgages. Even though these examples are not picked directly from the project participants' work training, they are topics connected to adults everyday life experience.

Below you will find examples of teaching materials used by the teacher who was responsible for basic skill training once a week:



This table was used in one of the numeracy lessons. In the processing industry it is important to be able to operate a fork-lift.

⁹ In the context of the Skills for Life strategy:

“Embedded teaching and learning combines the development of literacy, language and numeracy with vocational and other skills. The skills acquired provide learners with the confidence, competence and motivation necessary for them to progress, gain qualifications and to succeed in life and at work”. <http://rwp.qia.oxi.net/embeddedlearning/index.cfm>

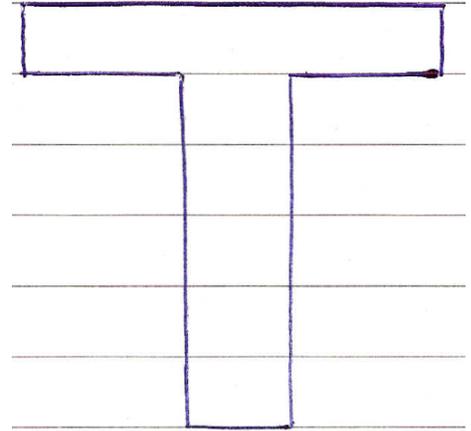
This example of a working drawing was used by the teacher.
This is supposed to be the drawing of a screw.

In this working drawing the screw is drawn in the scale of 10 : 1

Examples of what kind of tasks the learner were asked to do:

What will be the real measurements of this screw?

Make a working drawing of the screw in the scale of 4 : 1.



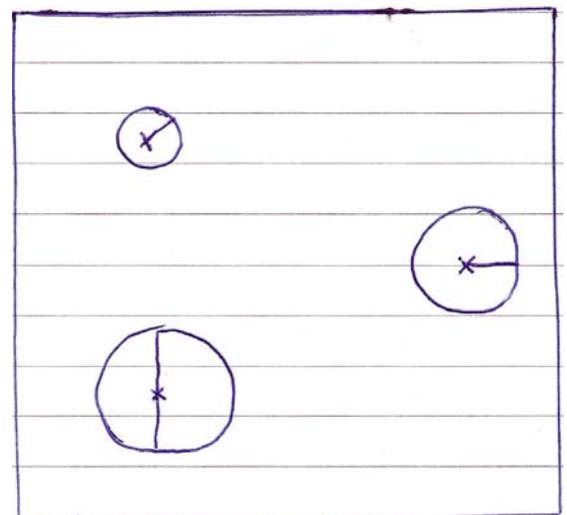
Another example of the kind of tasks the learners were asked to do:

4. *The metal board is drawn in the scale of 1:10*
5. *What is the size of the metal board in reality?*
6. *How can the centres of the holes be localized on the real metal board?*

What is the size of the radius of the three holes?

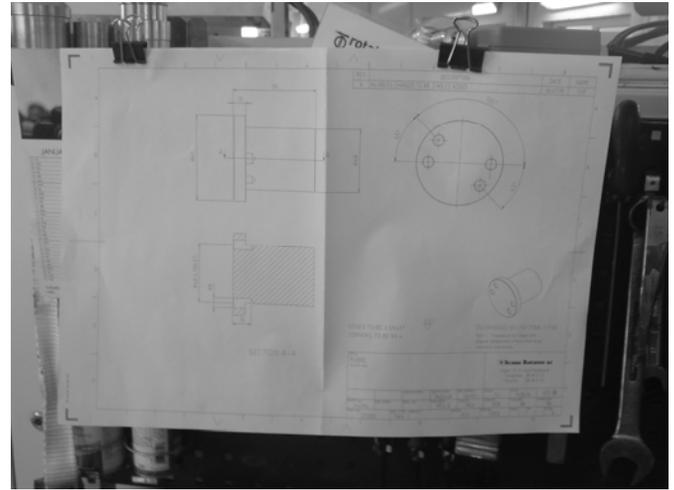
Examples of job training experienced by the project participants

In this factory, Rotator¹⁰, they produce valves for the oil industry.



¹⁰ <http://www.rotator.no/hovedsiden.asp?aid=14888&gid=6923&laid=>

Here is one of the project participants making parts to valves, based on the working drawing, for the of shore industries.



The working drawing

The outcome

Two of the project participants are now following a regular apprenticeship programme, one has achieved a certificate of apprenticeship, one has extended his trainee contract with a possibility to sign an apprenticeship contract in the near future and two have signed limited apprenticeship contracts. The management for one of the project participants who have signed a limited apprenticeship contract believes that he has good possibilities to sign an apprenticeship contract in the future.

One has been sent back to school due to poor language skills and two were offered summer jobs.

The general executive for the Xstrata Nickel Industries, who visited the Norwegian nickel plant in April, was inspired by this project to such a degree that he aims to export the idea of training “drop-outs” in basic skills and simultaneously give them job training opportunities, to other Xstrata plants.

MEDELSEINFORMASJON FRA NÆRINGSLEVTETS HOVEDORGANISASJON Årgang 5

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RETT PÅ SAK

02-2008

Lese- og skriveopplæring i bedrift

Produksjonsdirektør Per Ramstad har omvisning på Xstrata Nikkilverk for NHOs Arbeidsutvalg, med Ma. adm. direktør Finn Bergesen fr. (til høyre) og direktør Sigrun Vågen (nr. 10 fra høyre).

Xstrata Nikkilverk AS trår til når skolen svikter. Unge med lese- og skrivevansker får opplæring i Kristiansand-bedriftens regi.

– Jeg er forbauset over at norske elever kan gå gjennom skolen – som er full av pedagogisk kompetanse – uten at det avdekkes at de har lese- og skrivevansker, sier personaldirektør Wiggo Svendsen i Xstrata Nikkilverk AS, tidligere Falconbridge Nikkilverk. – I stedet blir de stemplet som pøbler og som dumme. Og kommer ut med en knekt selvtilitt.

Bedriften ønsket å gjøre noe med denne erfaringsen, at skolen har sviktet disse unge. Ikke minst fordi de trenger folk.

– Vi har et kompetansetrans arbeidsmarked. Samtidig har vi masse såkalte “drop out” som ikke blir fanget opp av skolestyret. For dem er skolen kun mareritt og elendighet. Med hjelp fra VUK-midler, spesialisthjelp utenfra, en times språktrening i arbeidstiden ukentlig over tre semestre, og faste rutiner i en trygg jobb, viser det seg at de involverte likevel ikke avviker boklig lærdom. Tvert om viser de entusiasme. Av de atten som i fjor dattok, jobber de fleste i Xstrata Nikkilverk, men det var også med noen lærlinger fra andre bedrifter. Bedriften har tatt initiativ til et nytt utviklingsprosjekt som retter seg mot unge som har falt ut av videregående utdanning som følge av manglende basiskompetanse. I dette prosjektet har bedriften knyttet til seg blant andre NAV, opplæringskontor, skoler og andre industribedrifter som samarbeidspartnere. Prosjektet har ni deltakere, og er nå inne i en tre måneders prøveperiode. Hver mandag har deltakerne individuelt tilrettelagt trening i basiskunnskaper, som lesing, skrivning og matematikk. Denne treningen foregår på Nikkilverket, og resten av uken har de arbeidstrening i bedrift. Målet er å utarbeide en nasjonal rekrutterings- og opplæringsmodell.

Skolesamarbeid
Xstrata Nikkilverk har også partnerskapsavtaler og samarbeid med skoler, både grunnskole og videregående. Samarbeidet er fra det innledende med gode enkeltskoler – der det er både godt for- og etterbeid, til enkeltbesøk fra skoleklasser og utplasing. Bedriften driver for øvrig interopplæring på alle nivå.

NHO-besøk
I januar besøkte NHOs Arbeidsutvalg bedriften. De ble imponert av effektivitet og innføring, men ikke minst av hva de gjør av intern opplæring.

– De har et veldig bra opplegg for opplæring av medarbeidere med lese- og skrivevansker, gutter som faller utenfor og interopplæring på alle nivå, sier direktør for arbeidspolitikk i NHO, Sigrun Vågen.

Media attention:

The project has been mentioned in several newspaper articles. The article “Rett på sak” was published in a periodical for members of Confederation of Norwegian Enterprise and the project has been followed closely by the social partners since the number of drop outs from upper secondary school is quite high in Norway.

Project Number 2: Adult Immigrants who Work as Cleaning Personnel

Several hundred cleaners are currently employed by the Municipality of Bergen, and most of them are immigrants. This municipality received funding from the Programme for Basic Competence in Working Life to run literacy, numeracy and ICT skills courses for their cleaners. Nygård school in Bergen, a school which has a special focus on immigrants, accepted the task to carry out the training. 27 of the cleaners enrolled in the course. Their literacy and numeracy skills were tested in order to find out which level of competence targets the courses should be based upon. To test the cleaners’ numeracy skills a mapping instrument was used. It tests the candidate’s number comprehension and number treatment. The mapping instrument also tests the candidates’ skills in what we call everyday life mathematics. The everyday life mathematics part will test the candidate’s competence in solving mathematical problems any individual may meet during the course of the day. The test is built on Olav Lunde’s ideas on principles of *dynamic testing* (Lunde 1997). The intention is not only to test the candidate’s knowledge, but also to learn something about the candidate’s learning potential.

Of the 27 there were 25 participants who joined in separately literacy-, numeracy- and ICT skills courses.

Numeracy classes:

The 25 learners were divided into different groups. Since they were immigrants, literacy was also integrated in the numeracy classes. All courses, except one, had a duration of 40 hours. Most of the learners worked with tasks based on competence targets at level 2. The numeracy themes and tasks were basically picked from the course participants’ daily work experience—e.g. measuring the correct amount of detergent, calculating the surface of the floor area to wash etc. As mentioned earlier, language and especially numeracy concepts connected to their daily work tasks played an important part in the classes.

Vox has published a textbook especially developed for immigrants. Some of the lessons were based on materials from this book. Parts of this book have been translated into English¹¹.

Outcomes

The learners felt they had improved their understanding of their daily work tasks better after going through the courses. Some of the learners were interviewed at the end of the courses and here are some of their responses:

I learned to measure detergents correctly, In addition to learning maths I learned the Norwegian language at the same time.

*I learned new words, now I can do measurements and I have learned to understand ml.
I like the intellectual challenge just to understand maths and to show that I can do maths.*

¹¹ http://www.statvoks.no/emma/downloads/migramaths_in_English.pdf

I want to do more numeracy. I would like to learn more about costs of travelling, domestic economy and understanding time.

I need to do numeracy in order to get a certificate of apprenticeship. That is my aim for the future.

Some of these statements, such as “*I like the intellectual challenge just to understand maths and to show that I can do maths*” and “*I need to do numeracy in order to get a certificate of apprenticeship*” correspond well to the key findings in NRDC’s research report ‘*Beyond the daily application*’: *making numeracy teaching meaningful to adult learners (Swain 2005)*

Other interesting comments from the learners were that they felt that they also learned more about the Norwegian language during their numeracy training.

Similar observations have been done by others. Solving numeracy tasks is often done in discussion with peers and teachers through verbal and written means (Sterrett 1990). Language, in both oral and written form, is the prime medium through which the learning of mathematics is mediated in either in formal or informal schooling. Learners have to read and decode written mathematical terms or elements, as well as comprehend the action implications of these elements (Laborde 1990) .

Three of the cleaners had very little school experience. One of them (from Somalia) had none and two others (from Thailand) had respectively three and five years of schooling from their homeland. These learners were given a special course where the tasks they worked with were based on competence targets at level 1. The course lasted for 10 weeks. The three participants were offered one lesson weekly which lasted for 1.5 hours. To compensate for their poor language skills the tasks they worked with contained as little text as possible. The two learners from Thailand showed good learning progress in numeracy, but the one from Somalia strived to cope with the selected tasks. She was offered special needs training in numeracy and literacy at Bergen Municipality Adult Education Centre after the ten weeks of this particular programme ended.

Project Number 3: Workers Employed in a DIY Centre

The aim of the project was to develop a pedagogical model for workers employed in a builders’ supplies/DIY centre in Bergen. Bergen Municipality Adult Education Centre had received funding to develop pedagogical models for facilitating numeracy learning at the work place. There are 20 employees working at different departments at the centre. 17 of them were tested with respect to their numeracy skills. Since most of them had quite good numeracy skills, the course was based on competence targets at level 3.

They were also asked what kind of outcomes they expected to achieve from carrying out a numeracy course. Here are some of the responses:

- 15 of them expected to increase their skills in everyday life
- 6 expected to achieve skills beneficial for their job
- 4 to strengthen their possibilities for further education
- 5 to be able to help their children with their maths homework

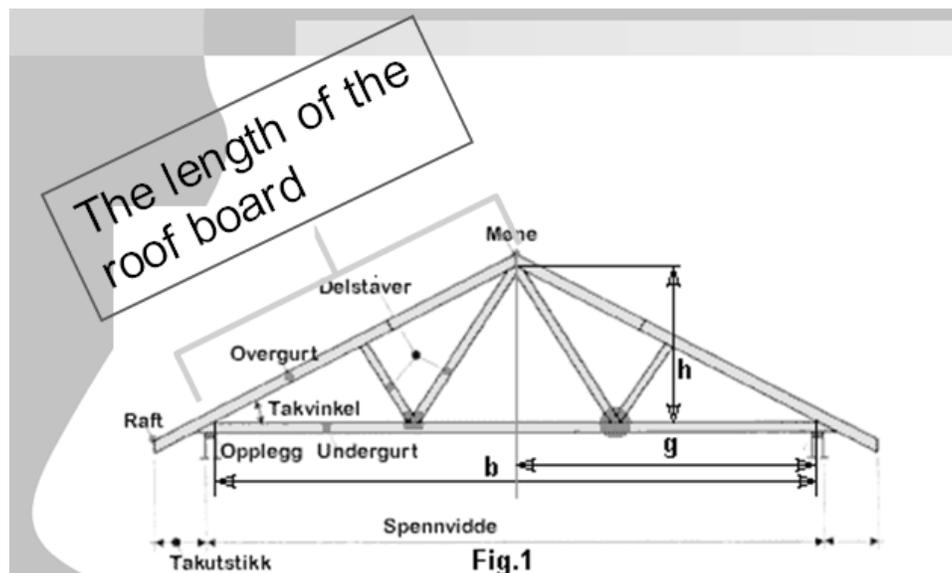
7 of the tested employees signed up to attend the numeracy course. The course lasted for ten weeks and each week they had two sessions of 1.5 hours.

To be able to find out what was relevant to use as teaching materials, the teacher visited the different departments where the potential learners worked and talked and listened to employees. The most interesting topic seemed to be calculating perimeter, area and capacity of different geometrical shapes; the conversion of units such as from cm to m.; how brick layers and carpenters can ensure that correct angles in roof construction; percentages; and the use of a calculator.

There is one particular episode from this course I would like to mention. Some of the course participants' need to know the roof angle (Norwegian: takvinkel) in the figure below. This angle, referred to as the Lindefjeld's (Mosvold 2005) angle in Norway and the rafter angle¹² in the US, equals the angle at which the top end of the roof boards must be cut, in order for the top boards to meet properly. Normally the workers do not need to calculate this angle, but can read the necessary information on a table.

One of the course participants was building his own cabin and he knew that during that process he would not have access to the table that could give him the angle which would make the two roof boards meet properly. He really wanted to learn how the Rafter angle could be calculated independent of the information given in the table. This question opened up for having trigonometry lessons.

This anecdote proves again that adults can be motivated for further learning if only they can see how they can use the result of their learning in their own lives, be it at work or in the private sphere.



¹²Wikipedia: <http://www.caspar.no/tangenten/2005/t2005-1.pdf>

Where Do We Go From Here?

The Norwegian National Budget has recently established that the Programme for Basic Competence in Working Life will continue in the foreseeable future. Vox will continue to work to facilitate numeracy learning for employees in the work place and for unemployed people who seek to increase their employability. We are currently finalising the writing of a set of guidelines for course providers on how to interpret the existent competence levels so as to adapt the training to the real needs of the participants. Tests and materials are being created, and we also hope to be able to continue our work of creating motivational materials for numeracy training. We are eager to cooperate with colleagues from all over the world in our efforts to increase the numeracy skills of all our adult population.

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