

Please cite this paper as:

Rosen, D.J. and I. De Meyer (2008), "Case Study: Belgium (Flemish Community)", in *Teaching, Learning and Assessment for Adults: Improving Foundation Skills*, OECD Publishing. <http://dx.doi.org/10.1787/172017435434>



**Teaching, Learning and Assessment
for Adults
Improving Foundation Skills**

**Case Study: Belgium
(Flemish Community)**

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Centre for Educational Research and Innovation

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TEACHING, LEARNING AND ASSESSMENT FOR ADULTS IMPROVING FOUNDATION SKILLS

Case Study: Belgium (Flemish Community)

David J. Rosen and Inge De Meyer

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The Flemish Department of Education and Training is responsible for formal adult education within the Flemish Community. Programmes include adult basic education, social advancement education or continuing education (OSP) and supervised individual study (BIS). All these types of education offer courses for adults with foundation skill needs. This case study features two exemplary programmes in the Flemish formal adult education sector. These two programmes have developed deliberate and systematic strategies using formative assessment to improve teaching and learning.

The first programme featured, “Learn Workplace”, is a collaboration between the adult basic education centre and the public employment service (VDAB) in Leuven. It was developed in 2004 as a European Social Fund (ESF) project. The main goal of the programme is to increase the literacy and numeracy skills (with a particular emphasis on numeracy) of the participants with regard to their future jobs. As the case study authors note, all the elements are in place for participant success in this programme: a strong education and training skills agency partnership, an experienced and effective teacher, a well-developed competency-based curriculum that is related to participants’ goals, a well-developed formative assessment process, and basic skills learning embedded or contextualized in the highly-motivating training context.

The second programme featured is a “second chance” school (*Tweedekansonderwijs* or TKO) in Hoboken. Second chance education (officially named “courses of general formation”) is embedded in the sector of social advancement education (OSP). Participating adults may earn a secondary school-leaving certificate that has exactly the same value as certificates awarded at the end of full-time secondary education at the compulsory level. Since 1999, centres providing second chance education have had the authority to grant diplomas and certificates (rather than adults having to sit a centrally administered examination, as in earlier years). The programme leader at the TKO in Hoboken took this new policy as an opportunity for staff to re-examine practices, to create and refresh its curriculum and instruction, and to align teaching and assessment. This study describes the process of transformation and its impact on teaching and learning within this programme.

The Flemish Country Background Report developed for this study which is available at www.oecd.org/edu/whatworks provides additional information on this system.

Introduction

Flanders is the northern, Dutch-speaking part of Belgium with approximately 6 million inhabitants. Since the four state reforms between 1970 and 1993 Belgium became a federal state consisting of communities and regions, each with its own specific powers. The authority to plan and carry out education and training lies within each of the four communities. This explains why the Flemish, French and German-speaking community each has its own educational system. The only educational powers of the federal government concern the ages of compulsory education, the minimum conditions for obtaining qualifications and teachers' pensions. This report only takes into account the Flemish educational system and thus uniquely refers to the policies for adults with basic skill needs that were set by the Ministry of the Flemish Community and to the Flemish provisions for this target group

Need

According to the 1996 International Adult Literacy Survey (IALS) data roughly one in five Flemish adults has low literacy skills. This group covers a spectrum of needs ranging from adults who cannot read, write or do numeracy at all to people who have problems with one particular literacy or numeracy area. Flemish adults with low literacy skills, however, tend to underestimate their reading and writing difficulties and report that they encounter very few problems caused by inappropriate skill levels. They may be unaware of their poor skills or, even if aware, don't regard this as a problem. However, a basic level of general knowledge is required in order to take part in today's knowledge-based society and labour market. Those who lack basic skills and qualifications are in danger of being left behind in an increasingly competitive society affected by a competitive world economy.

Those who leave formal education without a degree or qualification may have only the most basic skills and thus are at higher risk of being unemployed or encountering major problems in their work, social and personal lives. Although education in Belgium is compulsory until the age of 18, more than 1 in 10 Flemish students leaves school without any qualifications. Young adults with low levels of education not only have a greater chance of encountering literacy problems themselves, but there is also a greater risk that they will influence their children's literacy levels. In Flanders young adults whose mothers didn't complete upper secondary education are 5.5 times more likely to fail in obtaining a certificate of upper secondary education compared to students whose mothers did complete secondary education. Within this group there is also a significant difference

between males and females. According to labour force data, only one in three women without a secondary education degree has a job, compared to approximately 55 to 60% of the men (Flemish Country Background Report, www.oecd.org/edu/whatworks). This gender difference diminishes in accordance to the educational attainment level, but it never disappears.

All information concerning labour force related outcomes for individuals with low literacy levels leads to the same conclusion: adults with low foundation skills are less likely to be employed and are more likely to belong to the group of long-term unemployed. Low literacy skills have also been shown to negatively affect opportunities for further education and training, as well as health, including “social health.” All in all, approximately 15-18% of the Flemish adults don’t have the literacy skills necessary to participate adequately in modern society.

Formative assessment, a strategy to address the need

To address these issues, in Flanders, and across the industrialized world, excellent programmes that enable adults to acquire these basic skills are needed. One strategy for achieving programme excellence is the use of formative assessment. These two case studies are examples of successful implementations of formative assessment approaches in adult basic skills in Flanders, Belgium. They grew from policy reforms that began with the initial Belgian four state reforms in 1970, and that continue today. They illustrate the creativity that is possible under those reforms when programme leaders and teachers take the initiative. Formative assessment, as exemplified in these case studies, is systematic at the classroom and programme or school level. There are also policies and curriculum and instructional materials to support formative assessment.

Methodology of the case studies

Observations and interviews: The two case studies were conducted through visits to the programmes, interviews with teachers, administrators and students, and through review of background documents describing the programmes. Both researchers were present throughout visits to both programmes, and were accompanied in the visit to the adult school in Hoboken, by the Project Leader for this study, Janet Looney. Researchers took detailed notes on their observations of classes, computer labs, and interviews. They endeavoured to note details in the learning environment including physical space, equipment, books and other curriculum and learning materials, signage and other details that might be pertinent.

The two case studies include: 1) An Assessment of Mathematics Skills, from a work-related basic skills programme in Leuven, and 2) The Switch to a Formative Assessment Model in the Centre for second chance education in Hoboken (Antwerp).

The assessment of mathematics skills (Leuven)

Background

The adult basic education centre (CBE) or “Open School” in Leuven is one of 29 Flemish centres for adult basic education.

Until 1990, initiatives targeted to adults with low levels of education were found primarily within the social-cultural agencies and were based on social (and volunteer) work. With the decree of July 1990 adult basic education became a professional sector embedded in the field of adult education: the 1990 decree on basic education defined adult basic education as an educational provision under the authority of the Ministry of Education of the Flemish Community and gave it its own administrative and organisational model. The decree established a network of 29 independent centres and formulated a direct funding approach through a system of “envelope funding” (*i.e.* all centres received a grant based on their number of participants; they were funded on the basis of a total amount (envelope) per student hour.)

Since 1990 the sector of adult basic education has been the main provider of education for adults with low literacy skills in Flanders. The centres offer basic skills up through the equivalent of the first two years of secondary education. They try to provide a broad and varied range of basic education with different programmes that are balanced and co-ordinated with each other. They cover the following areas: Dutch as a mother tongue (NT1), Dutch as a second language (NT2), mathematics, basic social skills (MO), computer literacy, preparatory courses in French and English, and literacy skills for Dutch as a second language (NT2alfa). The curriculum is accessible, functional and determined by students’ real-life learning requirements, and the courses are free of charge. In the school year 2004-2005 adult basic education had around 26 000 course participants. Approximately the same number of Belgians and non-Belgians participate, but the majority of students enrolled are women (\pm 60%).

In September 2003 a modular system was introduced in the centres for adult basic education. Under this system, all domains are subdivided into several successive courses (modules), each with its own level of difficulty

and final goals. Centres for adult basic education have a high degree of autonomy and flexibility in how they offer services, although they do have to plan their learning activities using goals/targets defined by the government. The introduction of the modular system included two major steps. First, the government developed a set of “key competencies” (these refer to multifunctional and transferable individual skills which enable people to effectively apply their knowledge in life and to advance to a next modular or course level) and “final goals” (or development goals, which list the final attainment level of a course) for all adult basic education courses. This way the courses were made more flexible and transparent and are embedded in the general training structure of the Flemish educational field. Second, the modular system allowed the introduction of certificates and subject certificates: students receive a subject certificate on finishing a module and a full certificate on completing all the parts of a course. Both steps were intended to help improve the integration of adult basic education with conventional adult education and to facilitate progress toward further education or work-related programmes.

The centres for adult basic education not only provide their own courses, they also organise courses on request and in collaboration with other organisations. One of the common collaborations is with the Flemish Public Employment Service (VDAB), which is the main provider of vocational training in Flanders.

VDAB is a public service, controlled by representatives of the employers and the trade-unions (on an equal basis), whose primary objective is to offer training courses oriented to the labour market. They reside in the Flemish Ministry of Work and Social Welfare. VDAB organizes training for jobseekers as well as for employers and employees. Training may be offered in their own centres (there are 14 sub-regional employment offices organising short labour market and function-oriented, tailor-made courses in more than 70 “competence centres”) or in collaboration with outside organisations (*e.g.* on-the-job-training in companies). VDAB provides trainees with a specific certificate. This certificate is not comparable to official diplomas awarded by the educational sector, but is nevertheless highly regarded by employers.

An important characteristic of VDAB’s vocational training and placement activities is the client-oriented “trajectory approach”. Jobseekers in need of more intensive and personal counselling are assessed, trained (if necessary), placed and followed until they are likely to have a stable job in the labour market. The “trajectory” is defined according to both the demands of the labour market and the trainee’s aspirations and personal skills. In 2005, VDAB developed 85 647 individual trajectories, almost half of which (40 005) included adults with a low level of education (*i.e.* educational

achievement at ISCED level 2 or below). From this group, 55.3% (or 22 110 persons) found employment after finishing their trajectory. These figures clearly indicate that a major part of VDAB's activities include special efforts for disadvantaged groups among which are adults with low literacy skills.

Programme: “Learn and workplace within the VDAB’s vocational training centre”

In January 2004 CBE Leuven started the European Social Funds (ESF) project “Training courses leading to general qualifications”. This project was intended to develop training courses for adults with difficulties finding and/or keeping a job. Therefore the courses were not to focus on the teaching of one particular (technical) skill, but instead were to focus on those basic employability competencies and attitudes that people need in every job (*i.e.* basic literacy skills, basic ICT skills, communication skills, etc.). These skills and attitudes are referred to as “secondary competencies” in addition to the primary, technical skills most other courses provide.

Part of the ESF experiment was conducted within the VDAB’s vocational training area.

The CBE Leuven has had a fifteen-year relationship with the VDAB (or vocational training centre) in Haasrode (Leuven). VDAB acknowledges that secondary competencies are very relevant within this trajectory and they were willing to start a “learn and workplace” area in their centre in Haasrode. A teacher connected to the centre of basic adult education Leuven (Mrs. Heidi D’Haene) supervises this learn-workplace. The main goal of this part of the ESF-project was to develop a new educational concept that would increase the literacy (and in particular the numeracy) levels of the participants with regard to their future jobs.

In preparation for the learn-workplace a survey was conducted on the different vocational trainings. This survey asked about the secondary competencies necessary to follow each vocational course. Based on the targets mentioned in the “mathematics” and “Dutch” modules from the basic adult education, tables were developed demonstrating the level of maths and literacy needed to follow a particular vocational training. The tables were then completed after several observations of the vocational trainings sessions and one or more consultations with the VDAB instructors.

The focus in the learn-workplace is mainly on mathematics, both because there was a greater remediation need for mathematics due to the nature of the vocational trainings areas– construction, electricity and welding – and because it proved challenging to convince learners from

vocational courses to follow a Dutch course). As the maths material used in the centres for adult basic education focuses on the final mathematics goals set by the government, it is not adequate for the courses in the learn-workplace. There they need maths material focusing on the requirements of each particular job as contextualized or embedded maths tasks and assignments. Therefore, the CBE teacher started adapting the existing maths material and developing new material and specific tests for each type of vocational training, then compiling these resources by profession for future use.

Since a separate mathematics/Dutch/ICT offering wasn't an option, the CBE teacher developed integrated tasks. In these tasks math skills are practised, as well as language and computer skills. The learners receive a more elaborated task which implies several kinds of knowledge.

The following procedure is abided by within the learn-workplace:

- At the outset of a vocational training scheme the learners take a basic maths test (conducted by the VDAB instructor).
- Upon beginning a vocational training course the learners take another maths test (tailored to the training the learner wants to follow and based upon the test results from his/her first test - conducted by the CBE teacher in the first two weeks of the training course).
- Based upon the results from this second test each learner receives an individual trajectory plan. The content and duration will depend on his/her personal situation. The precise targets of the trajectory are defined at the beginning (*i.e.*, “we will learn this, but we won't learn that”), but these can change during the process. In other words, within the learn-workplace they use a tailored, client oriented approach.
- The courses in the learn-workplace are an integrated component of the vocational training.

Testing and participation in vocational training: November 2004-June 2005

VOCATIONAL TRAINING	TESTED	STARTED IN THE MATHS COURSE
Construction	17	12
Electricity	10	7
Sanitary/central heating	7	2
Basic techniques metal	10	1
Bus/coach	1	1
Forklift	2	2
TOTAL	47	25

Data from September 2005- December 2005(*)

VOCATIONAL TRAINING	TESTED	STARTED IN THE MATHS COURSE
Construction	7	5
Electricity	7	4
Sanitary/central heating	2	2
Basic techniques metal	3	1
Welding	1	0
Other	2	1
TOTAL	22	13

(*) The numbers in this period are lower compared to the earlier period because the courses were interrupted due to illness of the teacher.

The ESF-project “Training courses leading to general qualifications” began in January 2004 and ended in December 2005. The funding was calculated for that period only. Once the ESF-project had ended and the funding for this learn-workplace had stopped, VDAB’s vocational teachers, counsellors and other staff were asked whether, given their own limited funds, it was important enough to continue the math lab if the VDAB would have the responsibility of funding it. The staff affirmed its importance and the programme continued. Both VDAB instructors and its board of directors judged the project to be extremely positive and praised its contribution to the development of competencies learners need to follow vocational training.

Formative assessment practices

The most important player in this case study is the mathematics teacher from the centre for adult basic education who is out-stationed in the VDAB. She uses several formative assessment practices to address the specific educational needs of each of her students and to help them acquire the skills they lack for their future job. Furthermore she keeps every party involved in this project informed about the participant’s progress and problems. Without such a dynamic, communicative math teacher with experience in teaching adults with basic skill needs, the programme wouldn’t be as successful.

Formative assessment practices the teacher uses include:

- For each learner, the teacher assesses which of the skills needed to follow their chosen vocational training they lack, and she works with each individually towards acquiring those skills. During this process she doesn’t use the general summative approach used in basic mathematics courses. Instead, learning and assessment are carried out through individual tasks which she discusses with the learners. This **personal, informal feedback** helps the learners to clarify their knowledge and proficiency level without formal testing.

- **Dialogue with the learners** (individual conversations during which the individual learner’s problems are discussed). During these individual conversations she sometimes refers to other learners in the group to encourage the person she’s working with (“He/she also learned to do this. Was it very difficult to learn?”).
- **Peer learning.** When learners in the math class are following the same (or a similar) vocational course and have similar mathematical needs the teacher gives them tasks they can work on together.
- **Teacher “log”** – for each learner the teacher notes the learner’s progress and his/her further needs so she can adapt the tasks in the next class to each learner’s actual numeracy level.
- **Learner progress communication** – in writing – with the learner, vocational teacher (VDAB instructor) and VDAB counsellor. This way everybody involved in the programme can take the problems and progress for each learner into account in the activities within the individual trajectories they’re responsible for.

Observations

When we observed experienced, out-stationed mathematics teacher Heidi D’Haene working with learners at the VDAB, there were two brightly-lit rooms, one with tables where learners worked independently, and a small computer lab. On one of the tables were neatly arranged binders and resource materials for the afternoon’s learning. The binders included, for example, math for builders, metal workers, plumbers and electricians, and vocationally-specific math assessments. The materials included an original copy of each competency-based instructional module or exercise, copies which the learner could write on and keep, and an answer sheet that the learner could use to correct her or his work.

Learners in the vocational courses at the VDAB found their way to the open mathematics lab in different ways. Some were referred by their vocational teachers to improve a very specific set of math skills which the teacher had identified as needing strengthening. Some were referred after having taken a math diagnostic test as part of their seeking a vocational course, for example as plumbers, electricians, builders, or metal workers. Others found on their own that they needed to strengthen certain math skills or, placed on a job, found a work task required better facility with certain math skills.

Typically learners come to the math lab once a week, for two hours in the afternoon, for as many weeks as they need to accomplish their goals.

Most learners finish their trajectory in around three months, after approximately 30 hours of courses. On the day we observed there were six learners, all men aged 18-25.

In our interview with Heidi we learned that her primary interest is to help learners think in math and process it - not just learn the math facts and algorithms. She said that over time she has learners in the lab who have a very wide range of abilities and her challenge is to be able to quickly and effectively adapt to that range, to their individual needs and goals. She explained that when possible she groups learners with same goals who are at the same level, or she uses peer learning methods. However, since that this is not always possible, she always has materials for individually-paced learning related to each learner's goals. Furthermore she doesn't always know in advance who will be in the open lab for a given session, and she may have only one or two learners one day, and up to 15 on another. This makes adapting to learners' needs challenging.

When learners begin in the open lab they often plan to attend up to 10-12 times, but they have the option of attending up to 30 hours before they are placed in a job. Occasionally a learner who is placed on a job comes back to work on a particular math task. A new learner may take (the relevant parts of) a mathematics diagnostic assessment, although sometimes there isn't time for this. Heidi also experienced that several learners find taking a test difficult; they fear that it's "like school." Many of the learners, she said, rely on formulas and "tricks" to do math and have no real understanding of how to think mathematically. So she relies on direct, systematic observation of their learning as they try specific math tasks. For example, she hands a learner a worksheet and says, "Try this out. It may be too easy or too difficult. We'll see." Afterwards she closely observes how they are doing and adjusts the kind and level of instruction accordingly.

Using computers is integrated into the instruction, usually for 15 minutes at a time. Learners use educational software from a CD-ROM or from a web page. Heidi observes what they are doing, and together she and the learner assess whether they are ready to go on. She does not use learning management tools such as those which might be found in some large integrated learning system software. She prefers direct talking with learners and poses questions such as "What do you want to learn here in the lab?" "Have you seen this (module, computer instruction programme, etc.) before?" "Does it look like something you can do?" "Does this look like what you need to learn in order to...?". She considers dialogue an important part of the formative assessment process; "it captures their motivation".

Heidi tries to incorporate project-based learning whenever possible. This way the mathematics skills are grounded in situations that the learners find

vocationally relevant. One of the projects Heidi described is making a plan of a garden house. This can be done as a team or as an independent project. It involves linear and area measurement, reading the instructions for and mixing cement, planning a budget and other numeracy or mathematics, reading and writing skills.

When there are only a few learners this method of working is not difficult. However, when there are more learners, she must move quickly through the lab, and back and forth between the two rooms to stay in touch with how each learner is doing and assign new work - a model sometimes referred to as “teaching on roller skates.” It requires a high degree of expertise in mathematics knowledge, teaching strategies, and the ability to mentally keep track of how each learner is doing.

Immediately after each session Heidi takes careful notes on what each learner has accomplished and what the learner needs to do next time. She discusses her notes with the learner at the beginning of the following open math lab session. She also sends a copy of the progress notes, immediately after the session, to the VDAB instructor who gives the vocational course the learner attends and to the learner’s counsellor at the VDAB. This communication accomplishes several things. First, it keeps the VDAB instructor and counsellor informed of the learner’s progress. Second, it builds and maintains good relationships between the job skills training, VDAB counselling and basic skills staff.

Heidi also sometimes suggests ways in which, in the vocational classes, the numeracy skills could be reinforced. Collaboration with the professional VDAB training instructors is also practiced as new assessments are developed. Heidi works one-on-one with the vocational instructor to assess the numeracy skills and knowledge needed for training and for the job. In some cases this includes understanding math theory as, for example, understanding the binary system is important for certain kinds of electrical work. Heidi also works with the VDAB vocational instructors to tailor the curriculum to the needs of the vocational training, and the needs of the learners. For example, often a curriculum needs to have more levels added to address a wider range of learner needs.

This case is an excellent example of a multiple-partner, work-based, formative assessment model where all the elements are in place for participant success: a strong education and training skills agency partnership, an experienced and effective teacher, a well-developed competency-based curriculum that is related to participants’ goals, a well-developed formative assessment process, and basic skills learning embedded or contextualized in the highly-motivating training context.

The switch to a formative assessment model in the centre for second chance education Hoboken (Antwerp)

Background

The second chance education (*Tweedekansonderwijs* or TKO) centre in Hoboken is one of 13 Flemish centres that enables adults to obtain a diploma that has exactly the same value as certificates given in compulsory full-time secondary education.

Second chance education (officially named “courses of general formation”) is embedded in the sector of social advancement education (OSP) which is the largest sector within Flemish adult education. The origins of OSP can be tracked back to the old “evening schools” and “Sunday schools”, which were established to enable adults to catch up with the education to which they didn’t have access during their initial schooling. Now OSP (also referred to as continuing education) aims to impart knowledge and improve skills and attitudes which are necessary to function in society, participate in further education, practise a profession or master a language. By attending social advancement education, participating adults may obtain a recognised diploma, certificate or qualification.

Second chance education in fact is only a small part of social advancement education, currently provided in thirteen out of the 122 recognised centres for adult education. Its goal has remained unchanged for many years: to enable adults (18 years and older) to obtain the certificate of the second stage of secondary education or, at the completion of the third stage, a diploma of secondary education (without having to attend a secondary school). Furthermore second chance education helps adults to increase their opportunities in the labour market, to build self-efficacy, and to prepare learners to transfer more easily to continuing and post-secondary courses. Originally, the only way to earn the diploma was by passing an examination. However, since the decree of March 1999 on social advancement education, the 13 centres providing second chance education have had the authority to grant diplomas and certificates to the students themselves; students no longer have to take part in the examination sessions of the Examination Board of the Flemish Community. The diplomas granted have exactly the same value in society as the compulsory education diploma.

In Flanders, a prerequisite for admission to the second stage of secondary education (and thus courses of general education) is that participants must have a knowledge base at the primary education level (not a certificate of primary education). At the beginning of their enrolment in

second chance education learners are screened and referred to the most optimal starting position.

In contrast to most other courses within social advancement education the courses of general formation comprise full-time daytime education (but participants can also follow courses during two or three evenings a week). At present these are offered as modular courses. Depending on the course and stage of study, learners may achieve their goals in a few months or a year. Others, especially those who can only attend two or three evenings a week and who have family and work responsibilities, may take two-to-five years.

In 2000, just after the OSP decree of 1999, across Flanders only 1 350 people were enrolled in second chance education. This number rose quickly, however, and in the school year 2004-2005 more than 4 000 people were being served. There may be several causes for this rapid increase, including economic recession which make it more difficult to get work without a diploma, or the change in policy which allows TKOs to award the diploma directly instead of requiring examinations by the Examination Board of the Flemish Community in Brussels. The centres of second chance education also observed that there is a recent trend toward an increased number of younger (eighteen to twenty-one year-old) learners: a larger group of the Flemish early school leavers tend to find their way to courses of general education. This again may be caused by the economic recession mentioned above or might be a result from the federal policy measures that aim to decrease the number of young, unemployed people with basic skill needs.

The centre for second chance education Hoboken (Antwerp)

The TKO centre in the city of Hoboken, in Antwerp, has been a well respected adult centre since its opening in 1981. It began with volunteer instructors and focused on secondary school diploma preparation. For eighteen years, its learners went to Brussels each year to take their diploma exams at the Examination Board of the Flemish Community. Therefore, the courses followed the attainment targets and educational content used by the examination board. Since the 1999 decree on social advancement education, second chance schools not only have the authority to award diplomas on their own; they can also decide how they assess their students. For example, they can decide not to use a summative exam system and can expand the role instructors used to have, which in many cases was merely to prepare learners to pass a test. The centre in Hoboken took this new policy as an opportunity to re-examine its practices, to create or refresh its curriculum and instruction, and to have it perfectly aligned with its school-developed

assessments. Their points of view were recorded in a mission statement, that was decided upon by all team members.

Many second chance schools belong to educational networks that are coalitions of affiliated schools. (The major Flemish educational network, for example, is the Catholic schools network.) The centre in Hoboken, however, is independent and not part of any network. In some ways this has made the school more marginal - there are fewer resources, for example to maintain the school building - but in other ways independence is a strength. The school's principal can communicate directly with the Flemish Department of Adult Education and the school's board and staff can set their own goals and choose their own educational contents. They have chosen, for example, to try to reach everyone in their region who doesn't have a diploma, regardless of gender or religion.

The Hoboken TKO centre serves over 600 learners annually, eighteen years and older, with an average age of 25. The gender distribution is equal and approximately 15% are foreign born. About half of the learners, now, are in the 18-21 year age range, a relatively new phenomenon. In former years the school served almost entirely women with an average age of 40. Some of the younger learners, even though they have chosen to be in an adult-oriented TKO, bring with them adolescent needs and behaviours. This has sometimes created discipline problems, and absenteeism has increased. This is a widespread problem for TKO centres, and a problem as well for a school that uses a formative – ongoing – assessment model.

The school's faculty and staff of 50 people include instructors, administrators, and a team of three persons catering to the wider range of educational needs, including two school psychologists and one teacher who focuses on "learning to learn" skills. The psychologists help students who have "failure anxiety," who have learning disabilities and/or who may need referrals out for therapeutic and other non-academic counselling not provided by the school. Students with learning disabilities receive extra guidance during their learning process, but only if they are officially diagnosed. Learners without an official diagnosis but who have a suspicion of a learning difficulty or disability can go to the school psychologist for testing. If the result confirms the suspicion, the learner is required to get the official diagnosis and certificate necessary to receive the extra care during the learning process (*i.e.* adaptations to the teaching and learning process so students learn to develop their own skills for self-advocacy). The turnover rate for instructors at the Hoboken centre has been low.

The Hoboken TKO centre offers four courses of instruction:

- General secondary education, stage two (ASO2) for learners who have demonstrated acquisition of stage one competencies (*i.e.* a knowledge base at primary education level) and lack a certificate of second stage of secondary education.
- General secondary education, stage three (ASO3), leading to higher education.
- Vocational secondary education, stage three (BSO3), leading to employment.
- Technical secondary education, stage three (TSO3), leading to higher education and/or employment.

The admission criteria for the latter three courses are either a diploma from the second stage of secondary education or passing an equivalent test organised by the TKO centre. After completion of these three routes learners earn a secondary education degree.

Of the 569 learners enrolled in the Hoboken TKO centre in September 2004, more than half (*over* 300) were enrolled in the third stage technical or vocational programmes – very likely because this route to a secondary education degree is the shortest (usually one year as compared with two for the general education courses). It is worth noting that, in the Flemish system, this does not preclude enrolment in post-secondary academic studies. More migrants are enrolled in vocational areas than in the other areas.

In the general secondary education courses there were roughly equal numbers of women and men, but in the vocational and technical courses there were significantly greater numbers of women. Overall, 22% of the learners were non-native Dutch speakers, 4% of whom hold a foreign ID, and an estimated 18% of whom were “New Belgians”. Seventy-two percent of these were in the second stage courses, or in vocational courses.

Since the Inspection Decree of March 31st 1999, the external quality control of the centres for adult education (and thus the centres for second chance education) has been handled by the Department of Education, authorising adult education inspectors to evaluate overall quality of the centres. In 1999 the decision was made to inspect all centres for adult education over a 6-year period. Since 2006 it is possible to compare certain data for all TKOs and these show good performance records for the centre in Hoboken (which was audited in 2004): 85% of the learners enrolled in general education programmes participated in the centre’s evaluations and 64% of them succeeded. For the technical and vocational programmes 89%

of the learners participated in the evaluations of whom 71% succeeded. The averages for Flanders (all 13 TKOs) were respectively 58% of learners succeeded in the general education courses and 62% succeeded in vocational/technical courses. Compared to the other TKOs in Flanders the centre in Hoboken thus obtained very good subject completion rates.

The switch to a formative assessment model in the TKO centre Hoboken

Moving from a purely summative model of assessment to one that relies on formative assessment - where there is no exam at the end of the process, but instead many specific measures of explicitly described goals and learning objectives- was an idea initiated in 2002 by the centre's principal, Inge De Win. At that time she believed that alternative evaluation, specifically formative assessment, was the most important lever of change.¹

The principal's goal was to transform the school from a way to pass a test and earn a credential to a learning process that resulted in important learning for life skills, and excellent preparation for post-secondary education. For years the school's teaching staff, with relatively low turnover, was fully aware of the standards for passing the exams in Brussels, and their learners had a good record of success. The principal had confidence that the ultimate performance standards would be preserved in the process of moving toward inclusion of formative assessment, and toward real learning, not just test preparation. The school also needed to help the learners in transitioning to the new model. For example it was decided to accept past coursework and credits or competencies attained if their official record did not date from more than two years prior.

The planning process began in the school year 2002-2003 with an instructors' alternative assessment thinking and working group that met weekly in the first year. Since evaluation innovation is the major component of the educational reform of the Hoboken centre, this group was called EVA (from evaluation) and their main focus was to guide and coordinate their colleagues in developing the new assessment processes and instruments. At the beginning the EVA group read the basic (Flemish) literature on educational reform and formative assessment. They found the work of Peter Van Petegem on alternative views of education and on the development of

¹ During the interviews she indicated she had changed her mind on this topic. She now believes that more than formative assessment is needed and that alternative teaching should be the lever for change.

alternative assessment practices especially useful.² There they found realistic examples of how formative assessment instruments were used in other schools. Furthermore they prepared organized instructor exercises for twice-monthly two-hour workshops, seminars and meetings in which the entire school staff participated. Examples of such “EVA-sessions” include “How to give feedback?” and “How to describe educational goals”. Following the workshops instructors tried out the new processes and instruments.

Nearly every part of the process was created from scratch. They drafted learner objectives, designed and revised assessment instruments, and developed the planning document for the school. An enthusiastic younger instructor led the process. Later, as the process got further along, all the staff met monthly to review the formative instruments they had developed and the results they were getting. Many of the instructors, however, said that they were overwhelmed by the “EVA-sessions” and they experienced the transformation as too much, too fast. The methods used by the lead instructor and co-ordinators were also subject to critique, and adjustments were made accordingly.

The principal is of the opinion that after four years of reform, most instructors have changed their way of teaching. For example, the four team co-ordinators (for each course of instruction the centre has a team coordinator) have asked for a role in not only formative assessment, but in the entire process of transforming the teaching model to one in which learners take full responsibility for their learning, using instructors as a resource or guide. Although the principal felt that formative assessment was the beginning of making this shift, the use of formative assessment hasn’t yet meant that all instructors have given up their preference for front-of-the-classroom teaching styles.

Before the switch to a formative method of assessing, teaching focused on what was needed to pass an examination (see above). Instructors focused on memorized facts and knowledge. Now, what is emphasized in teaching is not only acquiring knowledge but also how to treat information, how to reason, how to use knowledge, and learning how to learn. It is no longer sufficient to “know about and accurately describe what happened on what date of the French Revolution”; instead, learners also have to know how to

² *Alternative views on evaluation* [Een alternatieve kijk op evaluatie.], Van Petergem, P. and J. Vanhoof, Wolters Plantyn, Antwerp, 2002.

Testing assessment – a manual for the development of alternative assessment models [Evalueren op de testbank – een handboek voor het ontwikkelen van alternatieve evaluatievormen.], Van Petergem, P. and J. Vanhoof, Wolters Plantyn, Antwerp, 2002.

find and use resources and to understand differing interpretations of the events.

The transformation in teaching that the principal of the Hoboken TKO centre hopes to achieve might be described as moving from the “sage on the stage” to a “guide by the side” model. Or, stated differently, from the instructor lecturing or demonstrating most of the class time, to learners working independently and in small groups. Those groups, she believes, should be organised in a classroom with tables (not just rows of chairs), with computers and a mini-library, with groups working on different tasks depending on the needs of the learners in that group, and with individually-paced instructional modules. The teaching transformation should be accompanied by an assessment transformation, including peer assessment, learner progress portfolios, and feedback to learners in relationship to progress on their goals. It should also be accompanied by counselling or coaching, where all the learners have an individual coach who helps them determine which in courses to enrol, and helps them to process how they are evolving as a learner.

This is a profound change, one that is not to every learner’s or instructor’s liking. In the beginning, especially, many instructors who had been effective using the school’s original model, became insecure. Some shared their thoughts about this. According to the principal, most instructors are now beyond their initial objections and agree that the new system is working for them, but not all. Some of the learners, too, object. Some of those who were familiar with the previous assessment system feel that the formative assessment process is too much work and feel that with formative assessment it takes longer to earn a diploma. Other learners, however, like the new system because they say they always know where they are in the process and what they need to do to get where they want to go and to achieve their stated goals. The principal originally thought it would take three years to fully achieve the transformation, but she says she now realizes that it will take much longer.

Another important difference compared with the past is the focus on the process of learning. Now instructors should pay attention to if and how someone is learning, and the learners should consider whether they are reaching the goals they have set for themselves in their learning plan.

The learning plans are decided upon when subscribing to the TKO centre’s courses. At the beginning of each semester newly enrolled learners go through a two-week orientation phase. In these two weeks learners have extensive talks with the staff in the centres. During these consultations students get the opportunity to explain their preferences for particular courses, and an individual “career schedule” is agreed upon.

In a given class the learning process begins with learners and instructors articulating what goals they want to achieve. It continues throughout the course with systematic feedback to each learner on whether or not the goals – and objectives or steps – are being reached. There are no grades and no rankings. Instead there are four categories of progress marking:

- not sufficient;
- almost sufficient;
- sufficient; and
- more than sufficient.

Although one might think this is just different language for grading learners, many of the instructors think a significant difference is their focus on *helping* learners – often through repeated efforts on a learning objective or task to move to the categories “sufficient” and “more than sufficient”. This sometimes involves learner dialogue with the instructor to better understand how the performance falls short of the standards and what is needed to reach them. This is a critical part of the formative assessment process, where through systematic feedback, learners progress toward competency or mastery learning. As learners become familiar and then comfortable with the assessment process, they begin to make their own structures for learning and to work independently.

Instructors help learners to reach their goals through the “stepping stones” (or scaffolding) of the assessments by being guides, resources and facilitators. As learners become more sophisticated they internalise the process and use new resources on their own without the “stepping stones” of the assessments. They learn to find good source materials, to consider their own authority, objectivity and reliability. They become independent learners.

During these first years of the educational reform each instructor developed formative assessment instruments and protocols for his/her subject and class. Some were developed by instructors in pairs or teams, and some were shared across the school, with those who teach the same course.

At present the centre is developing a more general model for evaluating students. This should provide a personal coach for each learner and will generate a student guidance system that keeps track of the individual learning careers of learners. This way the actual diversity in instruments used (and in their effectiveness) will disappear.

Formative assessment definitions and practices

From the principal's point of view formative assessment is not a synonym of permanent/ongoing assessment. She believes that permanent assessment has a negative, judgemental connotation for many students. Instead, she believes that formative assessment should incorporate giving feedback and guidance to the learners and teaching them how to learn in order to reach the goals they agreed upon.

When the instructors are asked to define formative assessment most of them refer to the assessment of the learning process of learners. They define it as an assessment strategy in which instructors evaluate learners, and learners evaluate themselves and each other. The instructors also consider it a strategy to motivate learners, to engage them in figuring out what and how they are learning.

Despite the principal's point of view some instructors do use the notions "permanent" or ongoing assessment to describe the formative assessment model. They say this assessment is integrated into teaching, as compared with having assessment at the end in the form of a big, high-stakes test. They characterize it as "guiding learners through learning sessions", "regularly giving them a lot of feedback", "making the goals of each course, and its objectives, much clearer", and "focusing on the process not the product".

Three definitions from individual instructors:

"Formative assessment is a better way to follow learners' progress. With the information the instructor receives this way, he/she can change the instruction, repeat it, add extra learning tasks, etc. The instructor also knows when he/she needs to change the teaching strategies and can keep track – all the time – who "gets it" and who doesn't."

"Formative assessment is a more accountable assessment system: one can no longer just "get lucky on the test". Because of the multiple and repeated assessments learners and instructors know whether or not the learner has grasped the learning and can apply it."

"Formative assessment is more like the world of work than the traditional school."

Furthermore, all instructors agreed that formative assessment takes a lot of time.

When asked about what specific formative assessment methods they use, the instructors mentioned:

- Exercises (oral presentations, group work and written exercises).
- Criteria lists (ratings using the four sufficiency categories mentioned above).
- Learner peer evaluation.
- Performance assessment.
- Evaluative discussion.
- Learners involved in setting the criteria for evaluation.

Observations

Instructors

Since the 1999 policy change, the course curricula are entirely competency-based, that is, criterion-referenced rather than norm-referenced. For each of the four progress categories instructors have been making assessment rubrics. After each semester they re-visit these and, where needed, they re-write them to make them valid and reliable. It is challenging for instructors, who may not be psychometricians, to assure instrument validity and reliability, but this process is enhanced when those who are teaching the same subjects work together in teams. For language learning subjects, for example Dutch, they have developed guided exercises that learners keep in individual portfolios. Learners and instructors look at the portfolios together to compare the contents and to determine progress. As one might imagine, this process is more time intensive, particularly as the instruments are still being refined, and the instructors and learners are new at this. In time, as this becomes more routine, it is anticipated that it will be less time-consuming.

The instructors whom we talked with were part of the transformative process and thought it was working. They said they saw more motivated learners who were achieving more and learning better. Because learners and instructors get regular, systematic feedback on their progress toward goals, they know what's going right and what needs more or different attention. Since the emphasis of the learning now is more on attitudes and broader learning for life skills (such as learning how to learn and problem solving skills) and not merely on passing a test, the instructors consider the learning now to be more connected to learners' lives.

One good example of how formative assessment works is how learners approach writing. A writing instructor said the curriculum now requires five

writing tasks (or benchmark assessments) during the semester. Learners are given a copy of the criteria by which their writing will be assessed after the first task. They have an opportunity to re-work their writing, to hand in each improved piece as many times as they wish, until they meet the criteria. In some cases learners are involved early on in setting the criteria. As a result, she said, learners not only improve as writers, but also improve in their ability to evaluate their own and others' writing. She said that this is consistent with the kind of writing many people have to do on the job, where they have to set their own criteria.

Learners

The learners we spoke with, for example in an economics class, said they were at the Hoboken TKO centre to get more knowledge, a diploma, a better job, and to prepare for post-secondary education. When we asked them to describe how they know if they are making progress toward those goals some said they have daily assessments where they are asked to explain what they have learned, regular practice tests in which they try to get a rating of *sufficient* or *more than sufficient*, and that if they do not get this rating they will do parts over until they do succeed.

They all agreed that formative assessment is more work than the old way. Some learners said they believe that certain subjects can be learned all at once, through cramming, but that others require building knowledge and skills over time. They thought that formative assessment is much better for the second kind of learning. They also noted that while in “normal” school, if you fail you have to do the whole year over; with the assessment model in this school there is assessment in every subject and each learner can progress as fast or slow as s/he wishes. As they put it “the harder you work, the faster you go. Here you work at your own pace.”

Some of the changes that were designed to help learners with the new formative assessment model, and also with the transformation to new ways of learning and teaching, while they could be useful for adult learners in all settings, are especially needed in a formative assessment model in which learners are to become independent and fully responsible for their own learning.

These transformation tools include:

- a “learning to learn” study skills course in which participants acquire skills, such as how to make mind maps as a way to summarize their knowledge and how to write effective narrative summaries. Other examples of study skills include how to write a kind of “table of contents” as an outline to organize their

knowledge, how to ask for help from an instructor or other learners and how to “make a story” out of complex information.

- a “fear of failure” course that some learners said helped them to feel more confident, and provided good guidance toward meeting their goals. These changes also have helped learners to feel safe to make mistakes and learn from them, and they have helped to maintain a supportive school climate that encourages learning at one’s own pace.

This practice is consistent with other research findings that indicate that a supportive school climate is extremely important to the success of formative assessment.³

Classes

In the “Learning to Learn” class we observed, there were five learners. The instructor began with an exercise on remembering. This was followed by theory on how the brain works to store information in short-term and long-term memory, and included reflection on what the learners actually did, in the exercise, as they tried to memorize. Next, the instructor drew a mind map on the chalk board as she presented new material. After this, she explained that what she drew was called a mind map, defined it (“it is a diagram of how the mind works”), and explained how information is stored and described its characteristics and how it could be used as a learning tool. Then each learner made a personal mind map. Finally the instructor explained that this technique could be used for planning, preparing a presentation, note taking, brainstorming, memorizing, or as a way to communicate with teams, large groups, and in negotiating processes. She gave specific advice on what characteristics enriched mind maps (pictures, colours, writing clearly, having many branches and flowing lines, etc.). Afterwards the instructor led a discussion in which learners described how they thought they might use mind maps in their courses. They suggested: to create agendas, to do planning, to structure what you are learning, to make summaries, and to test yourself for your reading comprehension. Throughout this process the instructor was engaging learners in seeing how the tools she introduced could be used, and systematically collecting information about the learners’ understanding of the tools and their applications. It was clear that learners were to try out the tools, see which ones worked for them for what purposes, and then add the ones they liked to their repertoire. They were developing an independent learning style. This

³ *Formative Assessment: Improving Learning in Secondary Classrooms*, OECD, February 2005.

class was, in many ways, a microcosm of the school's formative assessment and learning transformation model.

Challenges

Some instructors thought the reform was at first a difficult process to develop and apply, although it helped to have other instructors who were also searching for new methods of assessment. They said it might have been easier if they had had examples from other schools instead of having to create everything themselves. However, once they found a structure that worked for them it became easier to create new assessment instruments. Sometimes they also could use assessment materials from the compulsory school level, but (as they do with textbook materials) they still had to adapt the content to fit adults.

Some instructors felt the process should have been piloted first. This, however, contradicts the principal's opinion who felt strongly that it was better to have "everyone jump in together" - even though that might have been uncomfortable. Some instructors felt that they or their colleagues were still in danger of drowning and that some learners still suffer from the confusion of the immersion.

While many learners have benefited from the changes in the assessment system, some instructors felt not every learner has. They explained that some learners performed better in an exam-based system, a system whose rules were simple and clear. They said that learners who do not engage in the tasks do not succeed. They agreed, however, that learners who do engage with the system know more, and remember more. Some instructors speculated that the ideal is having two systems, the formative assessment model, and the "test prep" model they used to have - since some learners don't want an education; they just want to pass the exams and get their diploma.

Questions for further study

In 2002, the principal thought that the best lever for her educational reform was to start with changing assessment. At that time educational research showed that although the Flemish educational contents and objectives already matched the changing expectations and needs of the modern society (and for example not only focus on knowledge only but also

emphasise skills and attitudes), assessment strategies didn't follow this change (and thus merely are knowledge based).⁴

Now she's convinced it would have been better to stress teaching transformation instead of assessment change. This way it would have been easier for the instructors at the centre to get the larger picture and to see the assessment change as an integrated and necessary part of the teaching and learning reform. Which is the more powerful strategy for programme change and improvement, assessment or teaching change, or both? What are the outcomes for learners, over time? Do more – or fewer – pass the exams and get the secondary education degree and/or move on to jobs and/or post-secondary education? Do learners who have participated in this formative assessment model, for example those who have gone on to college, believe that the TKO centre in Hoboken has prepared them well for further education and work?

How do learners feel about learning? Are they more confident in their abilities to learn new things as a result of participating in a formative assessment model like this one?

The Hoboken Second Chance TKO model is a fascinating example of education transformation reform, and the role that formative assessment can play in that transformation. Although some of the questions are not yet answered, it is clear that formative assessment can play an important role in the transformation of adult secondary learning, from test preparation to an education environment in which students learn to question, think, relate their learning to their goals, acquire the tools for further learning, and know at any point how they are progressing.

Conclusion

The two case studies from Flanders provide evidence that formative assessment is a promising strategy in adult basic education for helping learners and teachers to know how learners are progressing toward accomplishing their goals and learning objectives. There is some evidence that with that knowledge, adults are more effective learners, and that teachers who have the information from formative assessments are better able to adjust their teaching strategies quickly to meet individual learners' needs. In both these cases, experienced and skilled teachers who knew their subject matter well spent the extra time required to build and use systems of

⁴ *Assessment in Flemish secondary education schools: a survey amongst teachers and principals* [Evalueren in Vlaamse secundaire scholen: een onderzoek bij leraren en directeuren], Verhoeven, J. *et al.*, Garant, Antwerpen – Apeldoorn, 2003.

feedback on student learning progress that they used with their students and with other faculty and staff. In both cases, the teachers' efforts were fully supported by programme administrators. There was attention paid in both cases to careful integration of students' goals and objectives, curriculum and learning content and strategies, and formative assessment. We do not know from these two case studies the extent to which formative assessment would succeed in other programmes, particularly with less experienced teachers, with less administrative support and with less time available to develop curriculum, learning content and formative assessments.