

**International Association for Educational Assessment**  
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**Assessment in an Era of Rapid Change : Innovations and Best Practice**

**Assessment of Non-academic Skills, Vocational Skills and Noncognitive Abilities**

**Paper submitted by : Scottish Qualifications Authority**

**Background**

Consultation with a wide range of stakeholders in Scottish Education, which included a comprehensive *National Debate in Education* in Scotland, confirmed a need for qualifications which allow and encourage young people of all abilities to develop important knowledge and skills for employment through practical experiences in a vocational setting. In addition to the above, *Determined to Succeed*, the Scottish Executive's Enterprise in Education strategy, states that "All pupils over the age of 14 must have an opportunity for work-based vocational learning linked to accompanying relevant vocational qualifications." In November 2004, the Scottish Executive report titled 'A Curriculum for Excellence' recognised this gap in the current curriculum and called for "more skills-for-work options for young people, robustly assessed, to help them to progress into further qualifications and work". This was followed by a commitment from the Minister for Education in Scotland, to "deliver a new course and qualification in learning about skills-for-work for 14-16 year olds by 2007"

**Qualifications in Scotland**

A comprehensive range of relevant, valid and successful academic and vocational qualifications are available for learners across Scotland, and the benefits to individuals, organisations, society and the economy are widely documented. The majority of qualifications available in Scotland focus on prescribed knowledge and skills, often described as cognitive skills, required for the academic or vocational area which they focus on and they lead, primarily, to further programmes of learning or employment, including self-employment.

**Employability in Scotland**

Unemployment statistics in Scotland at present are notably lower than previous years, which is an indication of strength within the Scottish labour market. However, changes in the patterns of employment have resulted in higher levels of movement of labour with people seeking employment, often in different occupational sectors, more frequently than in previous years. In tandem with this trend, recent research undertaken by various Sector Skills Councils in Scotland has consistently reported that in addition to relevant vocational skills and experience, employers are seeking individuals with well-developed 'soft skills' such as appropriate attitudes; emotional intelligence (ability to deal with frustration and control emotions); strong interpersonal skills; industriousness; leadership; ability to relate to others (clients, patients, customers) and listening skills. These 'soft skills' often referred to as noncognitive skills, are being consistently identified by employers as a key priority for the development of the workforce.

**Vocational skills and 'softer' skills**

A wide range of research is available to illustrate a variety of linkages, to greater and lesser extents, between cognitive and noncognitive skills and abilities. This research is often accompanied with evidence and associated conclusions suggesting the extent of impact which cognitive and noncognitive skills and abilities can have on the preferences, behaviours, choices and performances of individuals, and of organisations which utilise the services of individuals. A general overall

consensus appears to have been reached which supports the theory that for many dimensions of social performance cognitive and noncognitive skills can be equally important.

The traditionally accepted approach to learning and assessment for vocational and employment related qualifications usually does not require awareness-raising or exploration of the noncognitive dimension. Under this traditionally accepted approach, it is probable that learners are not aware of the impact which noncognitive skills, abilities and preferences exert on learning, employment opportunities and success in employment. This means that many learners do not have an appreciation of a fundamental aspect of the learning process which doubtless results in learners being unable to achieve their potential – both in learning programmes and in employment.

Heckman concludes that “schooling, employment, work experience and choice of occupation are effected by latent noncognitive and cognitive skills. These abilities in turn can determine social and economic success”. Heckman goes on to say that “schooling raises measured cognitive ability and noncognitive ability.” It is in our interests, then, to do what can be done when constructing learning programmes and associated assessment regimes to facilitate and encourage development and improvement of both abilities amongst all learners”.

### **Skills for Work Courses**

In response to the above backdrop, the Scottish Qualifications Authority (SQA) has been working with the Scottish Executive on an innovative programme of work to develop new Skills for Work Courses which will allow young people to learn from practical experiences linked to particular vocational areas, with opportunities built in to allow the identification, acquisition and development of the general skills and attitudes which employers value. Aimed primarily at young people aged 14 years and over, it is envisaged that these Courses will be delivered through partnerships between schools and colleges across Scotland.

Skills for Work Courses are designed to help candidates to develop:

- ◆ skills and knowledge in a broad vocational area
- ◆ Core Skills
- ◆ an understanding of the workplace
- ◆ positive attitudes to learning
- ◆ skills and attitudes for employability

A key feature of these Courses is the emphasis on experiential learning. This means learning through practical experience and learning by reflecting on experience.

### **Learning through practical experience**

- ◆ Teaching/learning programmes will include some or all of the following:
  - learning in real or simulated workplace settings
  - learning through role play activities in vocational contexts
  - carrying out case study work
  - planning and carrying out practical tasks and assignments

### **Learning through reflecting at all stages of the experience**

- ◆ Teaching/learning programmes will include some or all of the following:
  - preparing and planning for the experience
  - taking stock throughout the experience — reviewing and adapting as necessary

- reflecting after the activity has been completed — evaluating, self-assessing and identifying learning points

### **Skills for Work Courses - Core Skills**

Skills for Work Courses are designed to provide candidates with opportunities to acquire and develop the following Core Skills:

- ◆ Communication
- ◆ Numeracy
- ◆ Information Technology
- ◆ Problem Solving
- ◆ Working with Others

Unit and Course content is mapped against the national criteria for these five Core Skills, at appropriate levels, and a signposting approach in the Unit and Course documentation alerts deliverers as to when these skills are likely to be developed during delivery of the Courses.

### **Skills for Work Courses - Employability**

The skills and attitudes for employability, including self-employment, are outlined below:

- ◆ **generic skills/attitudes valued by employers**
  - understanding of the workplace and the employee's responsibilities, for example time-keeping, appearance, customer care
  - self-evaluation skills
  - positive attitude to learning
  - flexible approaches to solving problems
  - adaptability and positive attitude to change
  - confidence to set goals, reflect and learn from experience
- ◆ **specific vocational skills/knowledge**
  - Course specifications in Skills for Work Courses highlight the links to National Occupational Standards in the vocational area and identify progression opportunities

Opportunities for developing these skills and attitudes are highlighted in each of the Unit and Course Specifications. These opportunities include giving young people direct access to workplace experiences or, through partnership arrangements, providing different learning environments and experiences which simulate aspects of the workplace. These experiences might include visits, visiting speakers, role play and other practical activities.

### **Skills for Work Courses – Development**

The Courses are developed by Design Teams which comprise a wide range of subject/occupational experts which include representatives from schools, colleges, training providers, Sector Skills Councils, Standard Setting Bodies, employer agencies and relevant employers. A Design Team is created at the outset of the development of each Course and members work closely together throughout the development period through implementation and beyond. At the outset of the process, members of the Design Team are made aware of the rationale for Skills for Work Courses. It is necessary for them to demonstrate an appreciation of the *raison d'être* of these Courses before development can commence. This having been achieved, the Design Team identifies and agrees upon critical skills for employability in the respective occupational sector. Employability is the central

theme to these Courses and is therefore built into the Units (Outcomes, Performance, Criteria, Evidence Requirements, guidance on content, guidance on learning and teaching approaches) throughout the Course. An example of the employability skills identified and assessed for the Skills for Work Course in Hairdressing at SCQF level 4 is attached (Appendix 1).

### **Skills for Work Courses – Assessment**

The learning and assessment approach adopted for Skills for Work Courses facilitates the acquisition and development of vocational knowledge and skills as well as employability skills – both cognitive and noncognitive aspects of learning and assessment. This is undertaken in a variety of ways which includes a strong element of experiential learning and self-evaluation of own cognitive and noncognitive skills, abilities and progress throughout the period of learning. A strong element of review and reflection, which is recorded as learners progress through their Course, is supported through formative assessment activities.

A distinguishing feature of Skills for Work Courses is that, in order to achieve success, candidates are required to produce evidence of achievement in the employability skills, as well as evidence of competence in the vocational skills for the specific Course. This has been a major challenge in the development of these Courses.

The aim is to ensure that learners acquire the range of knowledge and skills from each of the areas covered by the Course. To do this, achievement is assessed at key points throughout the Course and learners are actively involved in both the learning and assessment processes. The assessment involves a variety of approaches including gathering folios of evidence, personal records, activity checklists and short tests. To gain a Course award, learners are required to successfully complete all of the Units which make up the Course – normally 4 x 40 hour Units.

In order to assist centres in maintaining national standards, and to cope with the demands of assessment, SQA has developed over the last six years a series of assessment packs for all Units in National Courses. These packs are referred to as National Assessment Bank (NAB) packs and have been provided for all Units in the Skills for Work Courses. Assessment for each Unit is carried out by qualified assessors in the delivering centres, normally using the NAB packs supplied by SQA. There is no additional Course assessment and so, unlike other National Courses in Scotland, these Courses are not graded.

Deliverers and assessors are encouraged to help learners become aware of their skills and associated development and to recognise that many skills can be transferred to other areas of work and life. It is hoped that this complementarity will improve awareness and development of cognitive and noncognitive skills and abilities which, in turn, is likely to enhance the performance and overall outcomes for all involved.

### **Skills for Work Courses - Pilot**

A selection of these Courses is being piloted in the academic session 2005-6 (Phase 1) and a further selection (Phase 2) will be piloted during the academic session 2006-7.

#### **Phase 1 of the pilot (for implementation in academic session 2005-6)**

The Courses available in Phase 1 are:

- ◆ Construction Crafts (at SCQF level 4)
- ◆ Sport and Recreation (at SCQF level 4)
- ◆ Early Education and Childcare (at SCQF levels 4 and 5)

- ◆ Financial Services (at SCQF level 5)

The first phase of the pilot involves some 45 partnerships centred around a total of 28 colleges and small numbers of various other providers (including employers and private training providers), working with around 145 schools and a total of around 1,450 pupils of all abilities from 21 local authorities across Scotland. A small number of schools from the state and independent sector are delivering the Courses autonomously. Early indications from feedback to SQA and from inspection visits carried out by Her Majesty's Inspectorate of Education in Scotland inspection visits are that the pilot is encouraging and highly positive in nature. A range of verbatim comments received as part of the feedback from centres participating in the Pilot is attached (Appendix 2).

### **Phase 2 of the pilot (for implementation in academic session 2006-7)**

The Courses being developed for Phase 2 are:

- ◆ Practical Experiences: Construction and Engineering (at SCQF level 3)
- ◆ Hairdressing (at SCQF level 4)
- ◆ Rural Skills (at SCQF level 4)
- ◆ Construction Crafts (at SCQF level 5)
- ◆ Sport and Recreation (at SCQF level 5)

This will involve schools from across all local authorities, and involve a total of 37 colleges; two employers; one Sector Skills Council; three council departments; four private training providers; and four schools delivering autonomously, as well as the Scottish Prison Service. Approximately 4700 young people will be participating in the initiative for the first time, in addition to approximately 1,000 who will remain from the first year of the pilot (450 students completing in 05/06)

This represents a healthy interest in the Courses in new subjects – Rural Skills, Hairdressing, and the Construction/Engineering-based Access 3 Course – as well as a significant increase in participation in the existing Courses in Construction Crafts, Early Education and Childcare, Sport and Recreation, and Financial Services.

### **Skills for Work – Pilot Support and Evaluation**

SQA Qualifications Managers, Development Officers, Project Managers, Quality Assurance Managers and External Verifiers are providing support through a comprehensive implementation support programme for the pilot. The Scottish Further Education Unit (SFEU) has published learning and teaching materials to support delivery of the Courses. Her Majesty's Inspectorate of Education in Scotland (HMIE) has carried out a number of supportive inspection visits to date and the Scottish Executive has employed the National Foundation for Educational Research (NFER) to evaluate the pilot on an ongoing basis and through a variety of evaluation activities. The management group for the Skills for Work pilot meets on a six-weekly basis to discuss progress and any issues arising. Phase 1 pilot Courses will be reviewed and revised as appropriate in Autumn 2006 with a view to launching full 'roll out' versions of the Courses in Spring 2007. The same review and revision schedule will take place in 2007-8 with the Phase 2 pilot Courses.

### **Skills for Work – Pilot Feedback**

Feedback on the outcomes of the pilot, to date, has been highly positive. All those involved, particularly deliverers and learners, appear to be benefiting from a positive experience. A range of responses reported by NFER is attached (Appendix 2). A report covering all aspects of the first year

of the pilot will be published by SQA in 2006 and evaluation of all aspects of the pilot will continue for at least the next two years.

## **Future proposals for Skills for Work**

- the development of at least one Skills for Work Course at SCQF level 6
- ensuring appropriate progression and articulation routes with other qualifications
- capitalising on emerging technologies to enhance learning, flexibility and assessment
- Consideration being given to the possibility of Skills for Life Courses
- Courses to be considered in the following occupational areas:
  - Hospitality
  - Retailing
  - Health and Social Care
  - Digital Media
  - Public Services
  - Energy

## References

Chemiss, C. (2000 April). *Emotional Intelligence: What it is and Why it Matters*. Consortium for Research on Emotional Intelligence in Organisations - Emotional Intelligence 1

Heckman, J.J. (2006 January). *Catch 'em Young*. Wall Street Journal Commentary – Page A14

Heckman, J.J. and Stixrud, J and Urzua, S. (2006 February). *The effects of cognitive and nongconitive abilities on labor market outcomes and social behaviour*. National Bureau of Economic Research (NBER) - Working paper No 12006.

People 1<sup>st</sup>. (2005 February). *Hospitality, Leisure, Travel and Tourism : A skills and labour market profile*. Sector Skills Development Agency

Streyfeller, L. Altmaier, E.M. Kuperman, S. Patrick, L.E. (2005 October). *Development of a medical school admissions interview: Predictive validity of cognitive and noncognitive attributes*. Med Educ Online (serial online) 2005:10.14



## Employability Skills Profile

### Hairdressing (SCQF level 4)

Hairdressing : Salon Awareness	= A
Hairdressing : Working in the Salon	= B
Hairdressing : Employability Skills	= C
Hairdressing : Creativity	= D

In addition to the specific, vocational skills developed and assessed in this Course, employability skills are addressed as detailed below:

Employability skill/attitude	Evidence
♦ Positive attitude and willingness to learn	A,C
♦ good timekeeping	A,C
• appropriate appearance	A,C
• customer care skills	B,C
♦ good communication skills – listening and talking	A,B,C
♦ ability to work in a team	B,C
♦ showing respect and consideration for others	C
♦ ability to follow instructions	A,B,C
♦ ability to multi-task	B,D
♦ timeliness (showing a good sense of time)	B,D
♦ awareness of health and safety procedures	A,B,D
♦ awareness of salon conditions	A
♦ awareness of salon roles and responsibilities	A,B
♦ confidence to seek feedback	C
♦ exploring own creativity	D
♦ review and self-evaluation skills	C

#### Assessment evidence:

- A = candidate folio of information gathered on salon roles and responsibilities and health and safety and assessor observation checklist of practical activities
- B = assessor observation checklist of practical activities in general salon duties, shampooing and conditioning and blow drying techniques
- C = assessor observation checklists of practical activities in working with customers and colleagues and candidate reviews of employability skills
- D = mood board, storyboard plan, assessor observation checklist of preparation and performance (creating a style on a mannequin head)

Skills for Work – Pilot Feedback from NFER

A selection of reasons for involvement in Phase 1:

- *“to help prepare students for their future (employability skills)”*
- *“whether their future is in education or in employment, we’re catching them at an early age and we’re trying to build up their experiences”*
- *“we want to help prepare students for the future”*
- *“to provide an access route to employment”*
- *“we want to help young people in the transition from school to work and improve pupils’ awareness of the world of work”*
- *“we want to give the students something that they would see as meaningful and that their parents would see as valuable as well, as it could lead to a job”*
- *“to provide an alternative curriculum for less academic students”*
- *“to expand and broaden the school curriculum more generally”*
- *“we tend to offer a fairly academic programme and felt it would be nice to offer something vocational as well”*
- *“one of the main reasons was to broaden the curriculum for our young people”*
- *“the three SfW Courses we offer are being delivered to students across the full range academically – they self-selected and our able individuals do have interests in these Courses”*
- *“we are seeing real improvement in attendance and motivation”*
- *“some of the students on these Courses seem keener to learn in other subject areas when they return from a SfW class at college”*
- *“our students find that there is a different atmosphere in the college and I think that a lot of them appreciate that. They have a different relationship with the lecturers and call them by their first names”*