

Assessing competences – developing competences: procedures and quality standards

▶ Procedures and instruments for the assessment of competences afford a particular opportunity in so-called search and transitional phases such as that from school to work to render personally related areas of potential and resources visible and to make them deployable for development processes. At the same time, they may also play a part in recognising (educational) risks at an early stage and instigating preventative support.

A multiplicity of various procedures for the assessment and development of competences have emerged and been deployed within the vocational orientation provision of general schools and in school-based and extra-school vocational preparation over the course of recent years. The question arising is which procedures are really suitable for the assessment of competences. The present paper presents various procedures and criteria for their evaluation.



URSULA BYLINSKI

Dr. phil., academic researcher in the "Vocational Learning Pathways and Training Careers!

Promotion of Target Group Related Vocational Education and Training" Section at BIBB

"Taking competences as a starting point" in the transition from school to work

One point which has always been emphasised in supporting vocational education and training for disadvantaged young people is that every aspect of support given to individual young people should take existing skills and competences as its starting point, meaning that their capabilities and potential should constitute the initial emphasis of pedagogical action rather than any deficits they exhibit (cf. Bylinkski 1996). The paradigm shift in vocational education and training from scheme orientation to personal orientation implemented in conjunction with the new specialised concept for vocational preparation schemes implemented by the Federal Employment Agency (cf. www.neueforderstruktur.de) meant that all support provided was made subject to the drawing up of a "competence profile" or an "aptitude analysis". The aim is to record school knowledge, the social and personal skills and competences the young people possess and their personal behaviour. The determination of occupationally relevant competences is then used to inform a "strengths and weaknesses profile" and forms the basis for an individually tailored training plan.

Within the scope of the BQF Programme "Promoting Competences - Vocational Qualification for Target Groups with Special Needs", funded by the Federal Ministry for Education and Research (BMBF), procedures deployed previously were expanded in design concept terms to form a comprehensive competence assessment process. These were subjected to targeted further development in various pedagogical contexts, at a variety of learning venues and with specific target groups in mind (BMBF 2006). The particular value delivered may be viewed in terms of the connection established between vocational orientation and diagnostics and the deployment of this as a basis for the targeted subsequent alignment of support provision aimed at specific occupational, social, school-based and special pedagogical aspects. All the competence assessment procedures developed within this context were fundamentally oriented towards strengths and resources, meaning they all commenced by posing the following initial question. Which competences does the person (already) possess and how is this person (already) using these? At the same time, the objective in deploying the procedures was also to strengthen the self-assessment skills of the young people and achieve greater sensitisation on the part of educationalists to the competences of the young people (BMBF 2006).

Quality standards for more transparency and acceptance of the procedures

The clear main focus of the diagnostic procedures and instruments in vocational orientation and preparation is on employability oriented methods of competence assessment (ibid). The aim is for the assessment of competences within the scope of an occupation selection process always to take place within a context related to a specific field where it takes place in conjunction with action situations. The objective is to achieve proximity to realistic work contexts and to the life world of the young people, the reason for this being that specific areas of experience exert a motivating effect and encourage action. Which procedures are actually suited to the assessment of competences depends on several factors needing to be weighed up from pedagogical points of view. Standards describing the quality of the procedures and stipulating indicators offer an assessment framework. This provides users with guidance in deciding which procedure is suitable to the aim they are trying to achieve. At the same time, this enables a greater degree of transparency to be generated in respect of the procedures in a field which now exhibits a virtually total lack of clarity and allows existing procedures to be compared with one another. Quality standards also raise acceptance of the competence profiles within the action area determined within the scope of the procedures. This is of particular significance, especially when these profiles are to be deployed for career pathway planning and when the aim is for them to serve as a basis for both funding provision and training plans.

What characterises "good" competence assessment procedures

Quality standards for the deployment of competence assessment procedures need to emanate from a specific basic pedagogical understanding and afford an opportunity for people to judge the procedures for themselves. Such standards also need to state the conditions necessary within the context for professional implementation and successful deployment (cf. box).

Implementation in practice makes it clear just how important the qualifications are of those who carry out observations, tests, evaluations and judgements within the scope

Quality standards for competence assessment at the transition from school to work

The instruments and procedures deployed should:

- be structured in a resource and process oriented management,
- adhere to fundamental pedagogical principles, such as subject orientation, managing diversity, relation to life and the world of work, competence approach, transparency principle,
- offer an opportunity to be adapted in a manner suitable to the target group and situation.

The following are considered to be necessary contextual conditions:

- · appropriate equipment with trained staff,
- an appropriate observational situation and a criteria based evaluation and
- written documentation.

of competence assessment. There is always a close correlation between evaluation and assessment and a person's own perception. For this reason, (self) reflection is accorded a high degree of significance when the aim is to gain a perception of a young person's competences and strengths. A further aspect is concerned with the necessary "framing" of a competence assessment procedure and relates to how and for what purpose findings are used. For this reason, the "quality standards" (DRUCKERY 2007) formulate that there is a "duty" to provide feedback, such as in the form of an individual feedback meeting in which the results of the competence assessment are presented to participants in an understandable manner so as to enable them to serve as the basis for their own setting of objectives. ("Where am I currently, and what would I like to achieve?")

The quality standard that results need to be recorded individually and in writing and subsequently documented applies to all procedures. The documentation contains agreements in respect of goals pursued and the pathways via which they are to be achieved as well as stating how these objectives can be achieved (cf. e.g. INSTITUTE FOR VOCATIONAL TRAINING, LABOUR MARKET AND SOCIAL POLICY [INBAS] 2007, pp. 82). In overall terms, written observation reports assist in achieving objectivity in terms of recording the perceptible action (qualitatively) and the frequency with which the action is perceived (quantitatively). The observation itself needs to be criterialed since only characteristics which have been observed on multiple occasions can be deemed "stable". In addition to the standards formulated, the quality criteria relating to validity, objectivity and reliability also apply to all competence assessment tests and procedures.

Competence assessment procedures at the transition school – work

The various instruments and procedures provide a range of opportunities. The deployment of such instruments and procedures, however, needs to be weighed up in terms of the respective intention and context. A combination of procedures may also make sense in this regard, and their vario-

Table Examples of competence assessment procedures

	Category	Procedure	Example	More detailed information (German language)
	Biographical procedures	Identification, appraisal, evaluation of competences with reference to an indivi- dual biography	Competence balance for migrants	www.integra-net.org/ produkte.html
		Career choice orientation (for pupils in all 9 th classes)	DIA-KOM, competence check in the North-Rhine West- phalia (NRW) train- ing programme	www.schulministerium. nrw.de/BP/Schulsystem/ Projekte/Kompetenz- check/index.html
	Simulation and employability oriented procedures	Assessment centres, vocational orientation instrument, entry and aptitude diagnostics	START (German acronym for Trying out Strengths – Testing Resources)	www.imbse.de
		Combination of diagnostics and training procedures	DIA-TRAIN (German acronym for DIAgnosis and TRAINing Unit)	www.ausbildungs- vorbereitung.de
		Assessment of potential and vocational orientation for girls	Taste for girls	www.taste-for-girls.de
		Integrated potential assess- ment centre procedure for young people in vocational orientation and training	Profil-AC	www.cjd-offenburg.de
	Balances/profiling	Individual support plan work	Diagnostics and case history questionnaires	www.foerderplan.de
		Internet based diagnostics systems	e-profiling, tele-profiling	www.e-profiling.de www.kompnet.de
	(Partly) standardised test	Knowledge and intelligence tests		www.testzentrale.de
		Aptitude and interest test, personality tests, occupational aptitude test (BET)	Occupational aptitude test (BET)	Hogrefe publishing group Diagnostics Commission of the Swiss Association of Vocational Guidance (SVB): www.testraum.ch
		Craft trades and motor skills aptitude tests	Hamet 2 (modules)	www.hamet.de

us alignments may complement one another effectively. Biographically oriented procedures are thus particularly suited to addressing issues relating to career choice in terms of the way these relate to individual life courses and serve to describe the subjects' own (everyday) experiences, interests and future perspectives. The fact that they highlight informally acquired competences more clearly means, for example, that they may be deployed to record the competences of young people from a migrant background. A competence balance is just such an instrument for the identification and evaluation of competences. The main focus here is on establishing awareness of competences and the resources they depict (Central Agency for Continuing Vocational Education and Training in Craft Trades, ZWH, 2007). Further procedures combine biographically oriented approaches with other instruments. DIA-KOM incorporates young people's everyday experiences, and these are then accorded suitable recognition and viewed as a form of competence acquisition (cf. INBAS 2007). This procedure was developed for the competence check in the North-Rhine Westphalia (NRW) training programme. Compiling an

inventory of data relating to a young person's own biography usually takes place methodologically using semi-standardised guided interviews. Within the scope of a conversational situation, empathy can be generated and expression lent to the valuing of the young people's experiences.

Assessments are simulation and employability oriented procedures serving the purpose of evaluating current competences and pursuing the objective of selecting appropriate applicants for certain positions. The procedures involve the setting of individual and group tasks (work simulation) and observation of the young people by qualified observers in accordance with fixed rules. The results are documented in the form of profiles. Occupational field related assessments simulate situations typical to the occupational field in question and record both the cognitive fine-motor skills and the social competences the participants possess (e.g. START and DIA-Train, cf. Table). The key aspect in applying these simulation and employability oriented procedures is to "evaluate types of behaviour rather than results". The aim of competence assessment procedures should be to address the heterogeneity of participants, recognise and value their diversity and use this in a positive manner for competence development. This also means selecting a designing tasks and tests in such a way so as to make these equally attractive and accessible for participants of different genders and from different cultural backgrounds.

An assessment procedure has been specifically developed for the *assessment of potential* and for vocational orientation for girls at the end of schooling ("taste for girls"). This enables young women to take part in simulated practical situations in order to find out about the requirements which characterise everyday working life in IT, craft trades and technological occupations. Impartial, specially trained observers then try to find out how participants deal with the situation and work in conjunction with the girls on evaluating their observations (self-assessment and evaluation from outside). Individual consultations then take place to develop specific career pathway support steps.

Integrated potential assessment may be viewed as a further development of the assessment procedure. The main focus here is more clearly placed on "matching" the individual competence profile (interests, skills and competences of the participants) against existing occupationally related requirements. Practical employment tasks performed constitute the basis for determining suitable tasks for the conducting of the assessment. Methodological standards within this process are considered to be: the definition of occupational requirements; task orientation and the combining of learning, support and assessment (cf. Arbeiterwohlfahrt 2007). A potential analysis represents a work and requirements situation and thus constitutes a special form of individual aptitude diagnostics.

Balances and profiling and a wide range of forms of (partly) standardised test procedures may be deployed as a supplement to the procedures described above in order to determine specific skills and competences. (Partly) standardised test procedures include occupational aptitude tests (such as those known by the German abbreviation of BET) of the kind deployed in vocational guidance and vocational rehabilitation. These record such aspects as accuracy of perception, spatial awareness, practical and technical understanding or arithmetical skills. Personality tests and a craft trades motor skills aptitude test (e.g. modules of "Hamet 2") have also been developed for occupational diagnostic purposes, particularly for young people with a learning disability. Diagnostic and case study questionnaires specially developed to enable an individual support plan to be drawn up are frequently used in the creation of balances and profiles. Computer or Internet aided procedures (e-profiling, tele-profiling) may also form a component of competence assessments. These research selected characteristics from the areas of personality and performance, motivation, ability to learn, flexibility and ability to act as a member of a team.

Evaluation and forecast

Quality standards for competence assessment procedures to act as support instruments in career choice processes and to accompany the transition from school to work need to be very closely tailored to the target group of school pupils and participants in vocational preparation. Procedures for the determination of the occupationally relevant competences of this target group are important instruments in the process of "discovering" the young people's own skills and competences and their own interests and motives. The next phase then involves "harmonising" these with requirements. Since occupational proficiency necessitates methodological, social and personal competence on the part of the individual in addition to professional competence, the main requirement is for employability oriented procedures due to the ability of these to encompass the dimension of cross-disciplinary competences.

The significance of competence assessment is revealed in search and transitional phases. Such phases extend beyond vocational orientation and vocational preparation to constitute important vocational education and training instruments and form the basis of competence development. Within *in-service second chance qualification* for semi-skilled and unskilled young people they provide a training exit, the aim being to complete a vocational qualification. Competence assessment procedures are an indispensable component of all educational policy recommendations relating to vocational training (as demonstrated in the "Innovation in Vocational Education Working Group" and the Report on Vocational Education and Training 2007) as well as

within current funding programmes taking place at a Federal Government or federal state level.

Specifying competence assessment procedures in a target group related and resources and biography oriented manner is viewed as an area where further development is required. In addition to this, the identification of competences which have been acquired within non-structured learning processes or in work contexts (non-formal learning) could constitute the establishment of an important foundation for ongoing training for young people pursuing in-service second chance qualification. Competences acquired via informal learning, such as those gained within the family or during leisure time, should also be identified in competence assessment procedures and be accorded recognition as competences. Instruments which have already been developed, such as the "Profile Pass" for young people (www.profilpass-online.de) provide procedures which place the emphasis on areas of potential which can then be linked to the potential inherent in ongoing learning processes. The developments in the field of competence assessment which have taken place over the course of recent years in the area of the transition from school to work should form a basis for the systematic honing and specific further development of the procedures for deployment in training processes and in other occupational areas of activity.

Literature

Arbeiterwohlfahrt Bundesverband: Das Integrierte Potenzial-Assessment im Übergang Schule – Beruf. Potenziale erkennen – Verantwortung stärken – Kompetenzen entwickeln. Bonn 2007

Arbeitskreis Assessment-Center e.V. Hamburg 2004

BMBF (2006): Bausteine zur nachhaltigen Gestaltung einer individualisierten beruflichen Integrationsförderung junger Menschen. Ergebnisse der Entwicklungsplattform 3 "Individuelle Förderung". Volume IIc "Kompetenzen fördern – Berufliche Qualifizierung für Zielgruppen mit besonderem Förderbedarf (BQF Programm)". Bonn/Berlin 2006

Bylinski, U.: Defizite beschreiben – Potentiale erkennen – an den Kompetenzen ansetzen. Zum Kompetenzansatz in der Benachteiligtenförderung. In: Jugend/Beruf/Gesellschaft. Volume 47 (1996) Issue 1–2, pp. 32–41 Druckrey, P.: Qualitätsstandards für Verfahren zur Kompetenzfeststellung im Übergang Schule – Beruf. Edited by Federal Institute for Vocational Education and Training, BIBB/Institute for Measures to Promote Occupational and Social Integration, IMBSE. Bonn/Moers 2007. – www.kompetenzen-foerdern.de/imbse_qualitaetsstandard.pdf (viewed 10 April 2008)

HUTTER, J.: Kompetenzfeststellungen. Expertise inklusive eines Handlungsleitfadens. Work commissioned by the Good Practice Center (GPC). Bonn 2004. – www.good-practice.de/expertise_kompetenzfeststellungen. pdf (viewed 10 April 2008)

INBAS: Kompetenzfeststellung, Teil II: Instrumente und Verfahren. Berichte und Materialien. Volume 9. Offenbach 2003

INBAS: Berufsvorbereitende Bildungsmaßnahmen: Kompetenzen feststellen – Ausbildungsreife fördern. Berichte und Materialien. Volume 18. Offenbach 2007

MÄHLER-BIDABADI, Ch.: Potenzialanalyse – eine Methode zur Kompetenzfeststellung bei Schülern/-innen. In: berufsbildung Volume 59 (2005) 94/95, pp. 47–50

ZWH: Praxishandreichung. Qualitätsstandards und migrationsspezifische Instrumente zur Kompetenzfeststellung und Profiling. Düsseldorf 2007