

Definition and Assessment of Competences in the Context of the European Diploma in Psychology

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Abstract. The European Diploma in Psychology defines a common European standard for the competences required to practice as a psychologist. This paper describes how that standard was developed and defined, and why it was considered important to bring together the traditional input-based specification of professional competence, in terms of curriculum and training course content, with a more outcome-oriented approach that focuses on the competences that a professional psychologist needs to demonstrate in practice. The paper addresses three specific questions. What are the competences that a psychologist should possess? Are these competences the same for all areas of practice within professional psychology? How can these competences be assessed?

Keywords: competences, professional qualification, occupational standards, professional training, European Diploma in Psychology

Earlier work on the European Diploma for Psychologists (Lunt, 2002) has led to the conclusion that the requirements candidates should meet in order to obtain the diploma should relate to the content and duration of their academic education as well as to demonstrated competences. In other words, there should be a combination of an input model and an output model (Roe, 2002). A system has been designed for the educational requirements, which defines categories of curriculum content and sets flexible limits regarding the size of each category. In this way, one can use the content of the academic curriculum to infer whether candidates have obtained the necessary knowledge and skills (Lunt et al., 2001). However, the question of how one can define and assess competences has, so far, remained unanswered. This issue is taken up in the present article. The general problem addressed is how competences should be handled in the context of the European Diploma, given the broad range of activities that psychologists undertake in various work settings. This problem can be defined in terms of three more specific questions, as follows:

1. What are the competences psychologists should possess?
2. Are these competences the same for all areas of practice within professional psychology?
3. How can these competences be assessed?

In answering these questions we will consider approaches that have been published earlier and make some propositions that are likely to lead to a feasible assessment system. In doing so, we aim to strike a balance between relevance, accuracy, and practicality. In view of the diversity of roles filled by psychologists and the fact that the diploma system has to be implemented and applied in countries with widely divergent educational and employment systems, the competence assessment method must be relevant but at the same time simple and flexible. The development of such a method will take time. Our proposal will be described in general terms only. Further elaboration and fine-tuning will have to take place later once final decisions on a possible European Diploma have been made and implementation has started.

Which Competences Should Psychologists Possess?

Two main steps are needed to identify the competences candidates should possess in order to qualify for practice as an independent professional psychologist. First, one has to gather information on job content and performance requirements in professional psychology, and second, one

has to define and operationalize the competences psychologists should have. Very little work has been done on analysis of the job content of professional psychologists. The most systematic and detailed study of this was carried out in the UK by the British Psychological Society (Bartram, 1996a) and provides detailed information on job content and performance requirements. It has also been used as the basis for operationalizing the assessment of competences and deriving learning specifications (i.e., input curricula) for them. For the second step we will also build on the article by Roe (2002) in which a scheme for the analysis of professional competences was proposed.

Functional Analysis of Practitioner Psychologists' Work

During the 1990s a substantial project on the job content and competences of professional psychologists (the term used in the project was "applied psychologists") was carried out in the UK by the British Psychological Society (Bartram, 1995, 1996a, b) with funding from the UK Department of Education and Employment. The output of this project was a set of occupational standards that specify the performance criteria for competence as a professional applied psychologist. These were derived from a series of workshops and consultations that involved applied psychologists from all the applied divisions and discipline areas (educational psychology, clinical psychology, counseling psychology, occupational psychology, clinical-neuropsychology, health psychology, and forensic psychology). The output from these meetings was analyzed to provide a detailed description of the functions that applied psychologists are required to perform once they have attained the competence necessary to operate as independent professional practitioners.

The process involved:

- Defining the key purpose statement. This is a brief statement of the major purpose of applied psychology. It is important because it identifies the key purpose of the profession and defines the boundaries and scope of the profession. It is from this statement that all occupational functions that define professional competence are derived.
- Analyzing the functions by means of functional analysis. Functional analysis is the technique by which standards are established. Functions are derived by taking the key purpose statement and asking: "What needs to happen for this to be achieved?" The answer to this, when addressed to the key purposes, identifies the key roles associated with the occupational area.
- Each key role is then further broken down by repeating the question: "what needs to happen for this to be achieved?" This provides a set of functions within

each role. For example, in the BPS scheme, Key Role 1.0 covers the observance of ethical and professional standards and is subdivided into 4 units (1.1 to 1.4). These cover maintaining standards, maintaining competence, and contributing to professional and personal development.

- Each function is then further subdivided into components that describe what is necessary to perform that function. For example, in order to maintain legal, ethical, and professional standards in applied psychology (Init 1.1), a psychologist would need to demonstrate that he/she could establish systems for security of information (Element 1.1a); establish systems for dissemination of information (1.1b), and ensure adherence to legal, ethical, and professional practices (1.1c).
- Details of performance and knowledge requirements are then specified within each of these components, which outline the performance and knowledge that an applied psychologist would need to demonstrate in order to be judged competent.

In the context of the present paper, the results of this work are of interest for three reasons. First, the project showed that psychologists drawn from across the spectrum of specialization areas *could* agree on the key purpose of the profession and the roles and functions they perform. In other words, there is something about being a professional psychologist that is distinctive and different from being a professional in some other discipline. This common knowledge base and its associated "person-focused scientist practitioner approach" was common to all the psychologists who took part in the UK project. Second, it appears from subsequent discussions outside the UK that, at the higher levels of description, the functional analysis as performed in this project has captured the nature of psychological competence in a way that would be readily recognized in other countries. Third, the results of the functional analysis helped to define competences (i.e., performance criteria) and to generate assessment specifications (i.e., "rules of evidence") that define what sort of evidence one should look for in order to judge someone as competent.

The current version of the occupational standards comprises three interrelated sections:

1. A set of standards which set clear performance criteria and define work contexts in which the relevant performance occurs. These define the "outputs".
2. A set of learning specifications, or "inputs", which define what knowledge and skills are necessary to acquire in order to meet the standards.
3. A set of evidence requirements, which define how one judges whether a person has or has not met the stan-

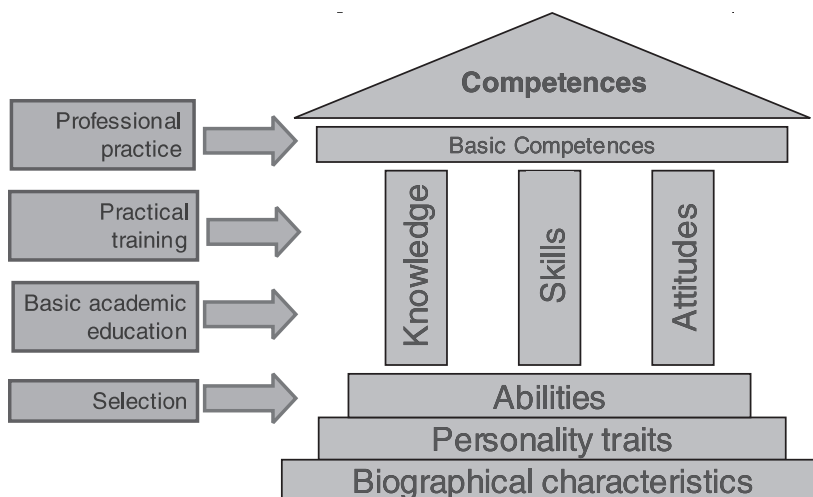


Figure 1. A model of competence (Roe, 1999).

dards. These requirements outline what sorts of evidence an assessor would need to examine.

A final important lesson learned from the UK experience was the need for occupational standards to be contextualized. That is, while it is possible to define standards of competence at a general level, covering all areas of psychology, such generic standards are of little practical value in defining learning needs and assessment requirements. The generic standards have to be grounded in a real-world context in order to be of practical value. In the UK this contextualization process has involved each of the specializations within the discipline (as defined by the Divisions in the BPS). First, the general standards were applied to the various contexts, and next the specific domains of knowledge and skills required in those contexts were listed, and the types of evidence of competence an examiner would expect to see from someone who was competent to perform in that context or setting were specified.

Defining Competences

For the EDP, we use the conceptualization of competence as given by Roe (2002). This means that competence is defined as “a learned ability to adequately perform a task, duty or role” (ibid, p. 195). Typical for competences is that they integrate knowledge, skills, personal values, and attitudes, and that they build on knowledge and skills and are acquired through work experience and learning by doing.

The relationships between these three aspects of the definition are illustrated in the architectural model of competences, presented in Figure 1. Competences rest on the pillars of knowledge, skills, and attitudes. This whole structure is built upon the individual person’s dispositions, i.e., abilities, personality traits, interests, val-

ues, etc. They define capabilities to learn, i.e., to acquire the necessary knowledge and skills, display the appropriate attitudes and, ultimately, to carry out psychological services for clients to the standard expected by their profession. Competences can be defined at higher and lower levels. Higher level competences are those that correspond to distinct work duties the psychologist has to fulfill, such as conducting an individual assessment, lower level competences refer to activities that cover only part of these duties, such as interviewing or testing. They are labeled subcompetences (see Roe, 2002).

The article by Roe (2002) only described the architectural model of competences and listed some typical examples of competences, subcompetences, knowledge, skills, etc. Here, we propose a taxonomic list of competences for the psychological profession. Thus, we take into account the specific nature of the psychological profession, which is to render *professional services* to clients, based on *psychological* principles, knowledge, models and methods which are applied in an ethical and scientific way. The services aim at the promotion of the development, well-being and effectiveness of individuals, groups, organizations, and society. We make a distinction between two main groups of competences, those relating to the psychological content of the professional practice process, called professional or primary competences, and those enabling the practitioner to render their services effectively, called enabling or secondary competences. The primary competences are unique for the psychological profession in terms of their content and the knowledge and skills required for their performance. The enabling ones are shared with other professions and providers of services. Both primary and enabling competences are essential for rendering services in a professionally acceptable way. There are also some basic competences assumed in this model. These are not specified in detail but are entailed by the primary and enabling

competences. Basic competences would include competence in areas of using information technology, oral and written communication, and working with numbers.

The competences provide a description of the various roles psychologists perform. These roles are performed in one or more of a variety of occupational contexts and in relation to a variety of types of client. Competences are based on knowledge, understanding, and skills applied and practiced in an ethical fashion. The competent practitioner is not only able to demonstrate the necessary skills but also attitudes appropriate to the proper practice of their profession. Attitudes are considered to be of special importance, since they express the unique nature of the psychological profession. While some knowledge and skill is general in its applicability, much of it is context-related. Thus, the psychologist who has demonstrated professional competence in one context with one client group cannot be assumed to be competent in other contexts or with other client groups in the same context.

Primary Competences

We distinguish 20 primary competences that any psychologist should be able to demonstrate; these have been grouped into six categories, which relate to the key roles mentioned before. These roles are designated as:

1. Goal specification
2. Assessment
3. Development
4. Intervention
5. Evaluation
6. Communication

These 20 competences are described in Table 1.

Enabling Competences

There are seven enabling competences that relate to professional activity in general and with which the practitioner psychologist should demonstrate the primary competences. These are described in Table 2.

Areas of Practice

In developing and assessing competences account must be taken of the fact that the actual content of the services offered is different, depending on the context within which one practices. This is a direct consequence of the fact that psychologists occupy different positions in society and deal with different types of clients, problems, methods, etc. This has consequences for the assessment of psychologists' competences. A psychologist who has developed

his/her competences as a clinical psychologist within a National Health Service setting should not expect to be able to demonstrate competence in all 20 primary competences in some other context without further training, experience, and supervision. The need to relate specifications of competence to the contexts within which they are demonstrated was noted earlier in relation to the UK occupational standards project. For that work the number of contexts defined corresponded to the existing *de facto* segregation of the professional psychologist within the UK into nine areas (each being represented by a Division within the BPS). As in many countries, this segregation reflects a mixture of historical, political, and job-related factors. The ways in which areas of practice are defined tend to differ between European countries for similar sociopolitical and employment-pattern reasons.

While the total field covered by professional psychology can be segmented into a smaller or larger number of areas of practice, an important question is how many contexts need to be distinguished when examining psychologists' competences. By focusing on the similarity and difference in terms of knowledge, skills, and application settings in the development of the European Diploma, three broad professional contexts, or "areas of practice", have been considered:

1. Health
2. Work
3. Education

This may be sufficient to start with when designing a basic diploma that covers the entry into the profession. However, when it comes to specialization, one would clearly need a finer differentiation between more narrowly-defined areas (e.g., child neuropsychology, aviation psychology, traffic psychology).

It is important to distinguish between the notion of area of practice and that of specialization. An area of practice defines the context within which one has demonstrated one's basic competence to practice: One cannot demonstrate competence *in vacuo*. Specialization, on the other hand, defines a higher level of expertise, knowledge, and skill, often with a more narrow focus, within an area of practice. This is why the above taxonomy is defined in terms of the settings (i.e., health-related settings, work-related settings, education-related settings) rather than "job titles" (such as clinical psychologist, or work and organizational psychologist).

In this section we will look at the differences between the three areas of practice mentioned above, first in terms of the work setting and the type of work to be done, and next in terms of competences. Several analytical schemes could be used to describe the various aspects of the psychologist's work. Here we adopt a scheme that has been

Table 1. Description of the 20 primary competences.

Primary competences	Description
A. Goal specification	Interacting with the client for the purpose of defining the goals of the service that will be provided.
Needs analysis	Gathering information about the client's needs by means of appropriate methods, clarifying and analyzing the needs to a point where meaningful further action can be taken.
Goal setting	Proposing and negotiating goals with the client, establishing acceptable and feasible goals, and specifying criteria for evaluating goal fulfillment at a later time.
B. Assessment	Establishing relevant characteristics of individuals, groups, organizations, and situations by means of appropriate methods.
Individual assessment	Carrying out assessment by means of interviewing, testing and observation of individuals in a setting relevant for the service demanded.
Group assessment	Carrying out assessment by means of interviewing, testing, and observation of groups in a setting relevant for the service demanded.
Organizational assessment	Carrying out assessment by means of interviews, surveys, and other methods and techniques that are appropriate for studying organizations in a setting that is relevant for the service demanded.
Situational assessment	Carrying out assessment by means of interviews, surveys, and other methods and techniques that are appropriate for studying situations in a setting that is relevant for the service demanded.
C. Development	Developing services or products on the basis of psychological theory and methods for the use by the clients or psychologists.
Service or product definition & requirements analysis	Defining the purpose of the service or product, identifying relevant stakeholders, analyzing requirements and constraints, and drawing up specifications for the product or service, taking into consideration the setting in which the service or product is to be used.
Service or product design	Designing or adapting services or products in accordance with the requirements and constraints, taking into consideration the setting in which the service or product is to be used.
Service or product testing	Testing the service or product and assessing its feasibility, reliability, validity and other characteristics, taking into consideration the setting in which the service or product is to be used.
Service or product evaluation	Evaluating the service or product with respect to utility, client satisfaction, user friendliness, costs and other aspects that are relevant in the setting in which the service or product is to be used.
D. Intervention	Identifying, preparing and carrying out interventions that are appropriate for reaching the set goals, using the results of assessment and development activities.
Intervention planning	Developing an intervention plan that is appropriate for reaching the set goals in a setting relevant for the service demanded.
Direct person-oriented intervention	Applying intervention methods that directly affect one or more individuals in accordance with the intervention plan, in a setting relevant for the service demanded.
Direct situation-oriented intervention	Applying intervention methods that directly affect selected aspects of the situation in accordance with the intervention plan, in a setting relevant for the service demanded.
Indirect intervention	Applying intervention methods that enable individuals, groups, or organizations to learn and take decisions in their own interest, in a setting relevant for the service demanded.
Service or product implementation	Introducing services or products and promoting their proper use by clients or other psychologists.
E. Evaluation	Establishing the adequacy of interventions in terms of adherence to the intervention plan and the achievement of set goals.
Evaluation planning	Designing a plan for the evaluation of an intervention, including criteria derived from the intervention plan and the set goals, in a setting relevant for the service demanded.
Evaluation measurement	Selecting and applying measurement techniques that are appropriate for effecting the evaluation plan, in a setting relevant for the service demanded.
Evaluation analysis	Conducting analyses in accordance with the evaluation plan, and drawing conclusions on the effectiveness of interventions in a setting relevant for the service demanded.
F. Communication	Providing information to clients in a way that is adequate to fulfill the clients' needs and expectations.
Giving feedback	Providing feedback to clients, using appropriate oral and/or audio-visual means, in a setting relevant for the service demanded.
Report writing	Writing reports to inform clients about the results of assessment, service or product development, interventions, and/or evaluations, in a setting relevant for the service demanded.

Table 2. Enabling competences.

Enabling competences	Definition
Professional strategy	Choosing an appropriate strategy for dealing with the problem(s) posed, based on a reflection on the professional situation and one's own primary competences.
Continuing professional development	Updating and developing one's primary and enabling competences, knowledge, and skills in accordance with changes in the field and the standards and requirements of the psychological profession, national and European regulations.
Professional relations	Establishing and maintaining relationships with other professionals, as well as relevant organizations.
Research and development	Developing new products and services that have the potential of fulfilling current or future clients' needs and generating new business.
Marketing & sales	Bringing current and new products and services to the attention of actual or potential clients, contacting clients, making business offers, selling services, providing after-sales services.
Account management	Establishing and maintaining relationships with (potential) clients, monitoring clients' needs and satisfactions, identifying opportunities for expanding business.
Practice management	Designing and managing the practice from which services are rendered, whether as a small business or as part of a larger private or public organization, including financial, personnel, and operational aspects, providing leadership to employees.
Quality assurance	Establishing and maintaining a system for quality assurance for the practice as a whole.

Table 3. Job content in three areas of practice.

	Area of practice		
	Health	W&O	Education
Work setting	Private practice or clinic, public health care institution.	Consultancy, business firm, public service, government agency.	School, educational institution, public service, government agency
Co-workers	Support staff, medical doctors, social workers.	Support staff, economists, engineers, HRM-specialists, managers.	Support staff, pedagogues, didactical experts.
Clients	Individuals, families, or other small groups.	Individual employees and managers. Groups, organizations, trade unions, public agencies.	Individual students, parents, and teachers. Schools, public agencies.
Purpose	Promotion of mental and physical health of individuals and families.	Optimization of productivity, social relations, and well-being of individuals in organizations.	Optimization of learning and adaptation of individuals in educational settings.
Object	Individuals. Household and family arrangements.	Individuals, groups, larger entities. Social and physical work environment. Work tools and equipment. Policies and procedures.	Pupils, teachers. Educational tools and equipment. Courses and curricula. Policies & procedures.
Tools	Tests, observation schemes, interviews; models of disorders and abnormal behavior; therapy protocols.	Tests, observation schemes, interviews, surveys, group and organizational assessment techniques; models of behavior in work settings; design and change methods.	Tests, observation schemes, interviews, surveys; models of behavior in educational settings; design and change methods.
Methods	Individual and family assessment. Counseling, behavior modification, hypnosis, psychotherapy.	Job and organizational analysis. Selection, appraisal, training, career development. Job, team, organization and workplace design. Organizational change.	Methods for needs analysis. Methods for curriculum design. Methods for learning and performance assessment.
Timing	According to individual needs	According to business needs and cycles	According to educational needs and cycles

developed for work analysis from an action theoretic point of view (cf. Roe & Zijlstra, 1991). It looks at work as a goal-directed transformation of a work-object that is carried out in a particular work setting, in collaboration with other people, using particular tools and methods in a particular time-frame for the benefit of a client.

Given the lack of empirical data on psychologists' activities, which would be needed for a rigorous categori-

zation into job families, we use a prototypical description of the three areas (see Table 3). In making these descriptions we have used information from various sources, including the O*Net database (US Department of Labor; see Petersen et al., 1999). We acknowledge that there may be considerable variability within categories and that their content may differ across the various European countries. Yet, the description conveys the important

Table 4. Competences in three areas of practice.

	Area of practice		
	Health	W&O	Education
Goal definition			
1. Needs analysis competence	Gathering information by intake interview and anamnesis in clinical setting. Clarification and analysis of client needs.	Gathering information by intake interview and document analysis in industrial setting. Clarification and analysis of client needs.	Gathering information by intake interview and document analysis in educational setting. Clarification and analysis of client needs.
2. Goal setting competence	Proposing and negotiating goals with client. Establishing goals and specifying criteria.	Proposing and negotiating goals with client. Establishing goals and specifying criteria.	Proposing and negotiating goals with client. Establishing goals and specifying criteria.
Assessment			
3. Individual assessment competence	Interviewing, testing, observation in clinical setting.	Interviewing, testing, observation in industrial setting.	Interviewing, testing, observation in educational setting.
4. Group assessment competence	Group interviewing, group observation.	Group interviewing, group observation, role analysis.	Group interviewing, classroom observation, role analysis.
5. Organizational assessment competence	<i>Does not apply</i>	Employee surveys; communication analysis; culture, assessment; structural analysis; performance analysis.	Student surveys; teacher surveys; communication analysis; performance analysis.
6. Situational assessment competence	Analysis of family, school, occupational setting.	Job analysis, work place analysis, employee surveys.	Course analysis, curriculum analysis, analysis of learning environment.
Development			
7. Service or product definition and requirement analysis competence	Therapy and counseling programs and aids; therapeutic training courses; education and prevention schemes.	Tests, AC's, itw's, surveys; HRM procedures, systems and policies; work tools and methods; time schedules; jobs; organizational structures; communication schemes; organizational change schemes.	Achievement tests; assessment techniques; didactical tools and methods; educational procedures, policies; courses, curricula, study aids and methods; educational change schemes.
8. Service or product design competence	Design or adaptation of aforementioned products.	Design or adaptation of aforementioned products.	Design or adaptation of aforementioned products.
9. Service or product testing competence	Examination of feasibility, reliability, validity, etc.	Examination of feasibility, reliability, validity, etc.	Examination of feasibility, reliability, validity, etc.
10. Service or product evaluation competence	Examination of utility, client satisfaction, user friendliness, costs in clinical use.	Examination of utility, client satisfaction, user friendliness, costs in industrial use.	Examination of utility, client satisfaction, user friendliness, costs in educational use.
Intervention			
11. Intervention planning competence	Developing treatment plan in clinical setting.	Developing plan for personal and situational intervention in industrial setting.	Developing plan for personal and situational intervention in educational setting.
12. Direct person-oriented intervention competence	Individual advice, counseling, behavior modification, hypnosis, psychotherapy, play therapy, psychodrama.	Selection, training, career development; group interventions; organization development.	Individual advice, counseling, remedial teaching; counseling and training of teachers.
13. Direct situation-oriented intervention competence	Implementation of new tools, methods, procedures, schemes. Introducing changes in clinical environment.	Implementation of new tools, methods, procedures, schemes. Introducing changes in work environment.	Implementation of new tools, methods, procedures, schemes. Introducing changes in educational environment.
14. Indirect intervention competence	Guidance, counseling, training of partner, parent, staff, community agencies.	Guidance or training of managers or staff in industrial setting.	Guidance or training of managers or staff in educational setting.
15. Service or product implementation competence	Implementation of therapeutic schemes, etc.	Implementation of work tools, methods, schemes, etc.	Implementation of educational tools, methods, schemes, etc.

	Area of practice		
	Health	W&O	Education
Evaluation			
16. Evaluation planning competence	Plan for evaluation of advice, counseling, therapy, etc.	Plan for evaluation of selection, training, career development, etc.	Plan for evaluation of advice, teaching, counseling, remedial teaching, etc.
17. Evaluation measurement competence	Assessment of criteria for health and well-being.	Assessment of criteria for productivity, effectiveness, efficiency, well-being.	Assessment of criteria for learning, adaptation and well-being.
18. Evaluation analysis competence	Analysis of intervention effectiveness.	Analysis of intervention effectiveness.	Analysis of intervention effectiveness.
Information			
19. Feedback-giving competence	Providing oral feedback to individual clients.	Providing oral feedback to individual clients; giving group presentations.	Providing oral feedback to individual clients; giving group presentations.
20. Report writing competence	Reports on assessment, products designed, interventions, and evaluations.	Reports on assessment, products designed, interventions, and evaluations.	Reports on assessment, products designed, interventions, and evaluations.

message that the areas differ with regard to the work activities psychologists are expected to perform and *a fortiori* with regard to the competences required to perform the work well.

When comparing the three areas of practice a number of differences strike the eye. First of all, clinical and health, W&O and educational psychologists conduct their work in very different settings. Most *clinical and health psychologists* are working in institutions that provide services related to health care or social work on a not-for-profit basis. Here, they typically collaborate with psychiatrists, and other medical professionals, social workers, and counselors. Their clients are parents, children, single individuals who suffer from a variety of mental and emotional problems, such as stress addiction, abuse, conflicts, etc. The aim of their work is to help people to overcome such problems and to restore and maintain mental health and well-being. They do so by means of psychotherapy, counseling and consultation, sometimes also by means of training and education. In contrast, the settings in which most *W&O psychologists* do their work are consultancies, business firms, public services, and government agencies, many of which operate on a profit-basis. Among the people they collaborate with are professionals in human resource management (HRM) and business administration, economists, engineers, lawyers, and many others. Their clients are typically healthy adults who perform a variety of work-related roles. Clients may be individual employees and managers, but also teams and larger social entities, such as departments or divisions. The psychologists' work activities aim at optimization of productivity, safety, well-being, and overall organizational effectiveness, and the facilitation of change processes. Most *educational psychologists* are employed in schools, educational institu-

tions, and training departments of other organizations. Depending on the specific setting they deal with pupils, students, and adult trainees as well as with educators, teachers, trainers, and so on. Collaboration may be with subject matter experts, specialists in didactics, but also with medical doctors. The general aim of their work is to create conditions that optimize learning and adaptation processes, and to provide help to individuals engaged in such processes.

The differences in the types of clients dealt with and the types of objectives aimed at are reflected in the methods and tools these psychologists use. While all of them will make use of basic methods such as observation, interviewing, and testing, there are differences in specific techniques and instruments employed and in the way in which they are used. For instance, *clinical and health psychologists* may use psychodrama and symptom inventories for diagnosis, and will rely on counseling and therapeutic methods for intervention. *W&O psychologists* may use job analysis and analyze absenteeism statistics for their diagnosis, and engage in personnel selection, or guidance of change processes. *Educational psychologists* may conduct diagnostic work by means of ability tests and cognitive task analysis for diagnosis, and seek interventions through consultation of students or parents and the redesign of teaching arrangements. The timing of their work may also differ in response to needs of clients, and typical work and school cycles.

There are two ways to look at all this. At an abstract level there is a certain similarity in the sense that all psychologists work with people as individuals and group members, and that they conduct diagnostic and intervention activities based on concepts and theories of psychology. But if one takes a look at the setting in which psychologists work and what they actually do, there are substantial differences.

These differences extend to the requirements that psychologists should meet, that is, the competences they must have, and more specifically the demands on the knowledge, skills, and attitudes that are needed. Table 4 illustrates this and gives generic descriptions of competences requirements in each of the three areas, using the taxonomy of professional competences presented in Table 1.

We do not claim that the descriptions in Table 4 give an accurate picture of all competences that psychologists should possess. For such a specification of competences one would obviously need an empirical investigation of psychologists' work within the three areas, as practiced in Europe. The descriptions are rather meant to illustrate typical competence requirements, formulated in generic terms. Of course, they would also need to be elaborated in more detail.

Comparing the columns of Table 4, it appears that some of the competences can be described in very similar terms for each of the three areas (health, W&O, education), while others are more differentiated. Competences related to the roles of goal definition, evaluation, and information are expressed in very similar terms, while competences related to development and intervention, and partly also assessment, are formulated in distinct terms. These latter competences directly reflect the differences between the three areas in outcomes aimed for and methods used. Designing a therapy plan, an employee selection system, and a course for students are really very different activities that require unique competences, made up of rather dissimilar bits of knowledge, skill, and attitude. For the other competences much the same applies. For instance, "proposing and negotiating goals with a client", as part of the intake process, takes very different forms when the client is a depressed individual or a relative in need of relief, compared to a senior line manager seeking support in large scale organizational restructuring. Although certain common elements (e.g., communicative skills) may be involved in acquiring these competences, they are quite different. Thus, a psychologist who masters the competence of effectively negotiating with the manager about the goals and criteria of an organizational intervention may not be effective in negotiations with a patient about a therapeutic intervention, or vice versa.

To put this more generally, we can conclude that while competences can be described in more or less similar terms for the three areas of psychology considered here, the actual competences are rather different. To the degree that competences comprise similar bits of knowledge, skill and/or attitude one may expect them to generalize to other settings than those in which they were obtained. However, the fact that competences are tuned to a particular type of setting and are made up of a unique set of elements implies that moving from one area to another will always require additional learning. This will require

additional study in order to acquire the necessary knowledge and skills. Since knowledge and skills are largely domain-specific and competences are context-dependent, a substantial amount of time and working under supervision may be required. It is exactly for this reason that it has been proposed to limit the validity or applicability of the European Diploma to one area of practice.

Assessment of Competences

A final issue to consider is the assessment of competences. The acquisition of competences during practical work under supervision clearly needs a form of assessment that is detailed enough to provide the candidate with sufficient feedback. At the end of the learning phase, when a candidate's competences have to be compared with the required competences, only a summative type of assessment is needed. There are, of course, many ways to design an assessment system for this purpose but given the complexities of comparing the manifold profiles of applicants from various countries, even within a single area, a simple assessment system is preferable. We suggest a practical rating scale that makes a distinction between four levels of mastery:

1. Basic knowledge and skill present, but competence insufficiently developed
2. Competence for performing basic tasks but requiring guidance and supervision
3. Competence for performing basic tasks without guidance or supervision
4. Competence for performing complex tasks without guidance or supervision.

This scale may be used to assess all 20 primary competences as well as the 6 enabling competences of a candidate. It can also serve to define the requirements for each competence in each area of practice. Some further thinking and empirical work will be required in order to decide which standards to use. Ideally one might wish candidates to reach level 4, which is clearly needed for independent practice, on all competences. However, for practical reasons we think that at the initial stage, when the European Diploma system is being introduced, it would be sufficient to require an average level of 3 for each group of competences, that is for each of the six roles and for the whole set of enabling competences together. This would imply that not each and every competence has to be fully developed, and that some degree of compensation is possible.

It should be noted that candidates can have competences in more than one area. In some countries where a broad academic training is given, this is even likely to happen.

Table 5. Competences across areas of practice (example).

Areas of practice	Health	W&O	Education
<i>Key functions</i>			
A. Goal definition		✓	
B. Assessment	✓	✓	✓
C. Development		✓	
D. Intervention		✓	
E. Evaluation		✓	✓
F. Communication		✓	✓
Enabling competences		✓	✓

Thus, a candidate can have an adequate level of competences in one role for more than one area (see Table 5).

In order to be awarded a European Diploma with a qualification to independently practice in a certain area, a candidate would have to show sufficient ratings in all cells of the column for that area. Ratings in other cells may be helpful in acquiring qualifications in an additional area.

Conclusions

In this article we have looked at the competence requirements associated with the European Diploma in Psychology, which is currently under preparation. We have noted that an input model based solely on academic education is not enough and one also has to use an output model, which takes account of demonstrated professional competences. Since competences are context-dependent and psychologists work in different contexts, it is commendable to make a distinction between broadly defined areas of practice. Three areas of practice, i.e., Health, Work, and Education seem to account for a large part, though not all, of psychological practice.

Therefore, it is worthwhile to consider competences in terms of these three broad areas when a European Diploma system at the entry level is launched.

Both the Leonardo projects and the BPS Occupational Standards project have shown that there exists a commonality of functions, conduct, and competence across psychological specializations and nations. Issues of professionalism, ethics, and the psychological approach to problems have been identified as the common core. Yet, there exist differences as well; these are related to:

- The context of professional practice
- Matters of specific competence, knowledge and skill
- Differences in the clients or client groups served.

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