

# **Professional Promotion of the Gifted and Talented**

Recommendations for the Qualification of Experts in Gifted  
Education

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# 1. Goals and Aims of this Brochure

In order to provide gifted and talented young people with an education according to their needs and possibilities, we need qualified persons to monitor and identify them, to teach them, to counsel them, and to organize school with respect to their special needs. All over Europe, there is a growing consensus that promoting the gifted and talented is necessary indeed. More and more single interventions as well as systematically organized programs are currently being developed and implemented. But in relation to the considerable variety and the incremental use of such interventions, the number of persons qualified to conduct them is still too small. For that reason, efforts are being made in many places to provide persons with the fundamental qualifications they need for educating the gifted and talented. Unfortunately, the ideas people have about the qualifications required for working with gifted persons are often quite superficial. Furthermore, the view that educational measures for gifted and talented young people as well as the qualification of the pedagogical staff need to comply with specific quality standards has not yet gained universal acceptance.

The aim of this brochure is to suggest several effective and sustainable measures to **qualify educators for promoting giftedness and the gifted and talented**. An interdisciplinary panel of experts from Europe's German-speaking countries have gathered to develop standards for the education and qualification of educational staff. In essence, this booklet contains suggestions for the design of **Master's degree programs** for those working in the area of gifted education as well as **standards for the basic education** of all teachers regarding the promotion of gifted and talented children and youth.

This brochure was written for the following **audiences**:

- o For those in charge of the design and implementation of degree programs at **universities** and **colleges**, and in the **administrative sectors of the educational system**: The present brochure may provide guidelines to enhance excellence (in the sense of the Lisbon Strategy) when designing Master's programs concerned with the education of the gifted and talented.
- o For the **initiators and supporting organizations of Master's programs** who wish to have the quality of their further education programs evaluated by an in-

dependent institution. The authors of this brochure will be pleased to assist them as dialog partners and auditors.

- o For those **wishing to develop professionally** within the field of gifted education. This brochure offers quality measures that will help them to critically evaluate what is offered on the educational market.
- o Last but not least, for all colleagues in the European education system who are engaged in **quality assurance** of gifted education as well as in the qualification of those fostering and educating gifted children and youth. We invite them to make suggestions and comments on the quality criteria proposed in this brochure, and to contribute to their further development.

With this booklet, the authors intend to increase awareness of the importance of quality in the professional development of teachers regarding gifted education. In this field, qualified staffing is one of the crucial quality criteria. Investing in the qualification of educational staff will have an immediate impact on the quality of instructional work in the schools.

In the spirit of the Bologna Declaration, which aims at developing common European grounds in education and qualification, this brochure explicitly assumes an **international perspective**. Our continuing efforts not only aim at discussing the standards proposed here on a broader European level, but also at establishing international co-operations between universities and colleges concerned with the development of further education modules and programs in giftedness and gifted education. Interested partners are cordially invited to collaborate in this project.

## 2. IPEGE – International Panel of Experts for Gifted Education

In February 2007, the „International Panel of Experts for Gifted Education“ (iPEGE) was founded in Lucerne, Switzerland. The members of this international task force are from **Austria, Germany** and **Switzerland**. Altogether, they represent the following eight institutions:

- o Austria: Austrian Research and Support Center for the Gifted and Talented (Österreichisches Zentrum für Begabtenförderung und Begabungsforschung, **ÖZBF**); Teacher Training College of **Styria**
- o Germany: Universities of **Erfurt, Rostock, and Trier**; Teacher Training College of **Karlsruhe**
- o Switzerland: Teacher Training Colleges of **North-West Switzerland** and **Central Switzerland**

### Founding Members of the International Panel of Experts for Gifted Education

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The Austrian Research and Support Center for the Gifted and Talented (özb) constitutes the executive Board of the panel and coordinates its collaborative efforts.

## Goals of iPEGE

Our prime goal is **to develop standards** for the tertiary education of those concerned with educating and schooling gifted and talented children and youth. These standards are supposed to serve as suggestions for the design of professional development programs for teachers in the field of giftedness and gifted education and to contribute to quality assurance.

Furthermore, iPEGE is developing the **fundamentals of a postgraduate professional development program**. Creating networks between the universities and teacher education colleges involved, exchanging lecturers as well as the reciprocal accreditation of course credits are supposed to facilitate the implementation of differentiated study programs and keep costs low.

The medium-term goal of iPEGE is **to coordinate those research projects within the panel** which relate directly to gifted education. In order to support this goal, one of our aims is to document existing and ongoing research projects. A first documentation of research projects in Austria, Germany, and Switzerland has been published<sup>1</sup>. In addition, the members of iPEGE keep each other informed about current developments in gifted education research and policy and work out **positions and statements about fundamental issues** in this field.

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<sup>1</sup> Preckel, F., Gräf, J., Lanig, M. & Valerius, S. (2008). Begabungsforschung in Österreich: Erstellung einer Forschungslandschaft und Skizzierung der Forschung in der Schweiz und Deutschland. Projekt im Auftrag des özbf mit Finanzierung durch das bmwf. <http://www.begabtenzentrum.at/wcms/index.php?id=481,0,0,1,0,0>

### **3. Quality Assurance in Gifted Education**

In contrast to the central European countries, where the justification and design of giftedness education within the public school system is still an ongoing issue, other countries are a little more advanced with respect to the practical promotion of the gifted. In these countries, quality standards are being increasingly developed and implemented in order to enhance the quality of gifted programs which are already in use. Quality standards define a target state and thus serve as internal or external frames of reference to which the status quo can be compared. They also provide a basis from which general or concrete developmental goals can be derived, which, in turn, can serve as objectives for educational institutions and systems.

With respect to the promotion of giftedness, three types of quality standards are of particular importance:

1. Quality standards for gifted education at school or supervisory school authority level;
2. Standards concerning the outcomes of teacher education, in particular with respect to what (further) education programs specializing in gifted education ought to achieve;
3. Standards for educational institutions carrying out the programs mentioned in paragraph (2), that is, quality standards for tertiary education institutions and their teaching activities.

With respect to the first two types of standards, elaborated concepts from the Anglo-Saxon region are already available; therefore, only the third type requires tertiary education institutions to resort to general and, with respect to study contents, open standards.

Standards unfold their full potential only if the persons in charge of the programs are committed to them and focus their efforts on achieving them. The bindingness of such standards can be achieved by external specifications, e.g., through laws or regulations, or internally by voluntary commitment. These two alternatives are complemented by competition in the educational market as the third type of pressure for action, which prompts institutions to develop noticeable and visible quality management systems. Nowadays, educational institutions often feel impelled to provide the recipients of their products, i.e. their educational and study programs, with proof of quality. Providing evidence that quality standards are relevant to one's own work ultimately serves the goal of securing one's market share; however, it can also contribute to the optimization of learning opportunities.

The following paragraphs will present quality standards in the context of gifted education.

### **1. Quality Standards for Gifted Education**

Standards which are supposed to describe the quality of gifted education in schools and school districts can be understood as an opposite to the earlier, merely investment-oriented conception of gifted education (which took the success of these programs for granted), and as a complement to the increasing autonomy of educational institutions. It is interesting to note that these standards neither focus on students' learning outcomes nor on the productivity of educational institutions, nor on internationally recognized indicators of what educational systems achieve, but rather on the programs themselves, which are supposed to yield positive effects through their mere implementation.

The following three fictitious examples may illustrate which standards have **not** yet been implemented:

- Example A. „All students who are identified as mathematically gifted through a standardized test are supposed to master the school curriculum of grade ten by the age of fourteen.“
- Example B. „Universities and colleges shall enable 10% of their students to graduate in less than 85% of the usual time.“
- Example C. „50% of all persons identified as intellectually gifted are expected to graduate from university with a doctoral degree.“

Standards of this kind would require the educational system to meddle with the citizens' individual decisions. On the other hand, formalized expectations like the ones mentioned above would beckon to the educational system that promotion of the gifted has to be conceived with respect to its outcomes, not to the programs, and it would become clear which efforts educational institutions are required to make.

Probably, it has to be considered a great success already that for certain programs at least, quality standards have been implemented in several countries. The US, for instance, have developed standards for giftedness education at school and district level which have been declared binding in several US states or which have been called for by influential stakeholders. In 1998 already, the US American *National Association for Gifted Children* passed standards that provide four to six criteria in seven areas altogether<sup>2</sup>. These seven criterion areas include program design, program administration and management, student identification, curriculum and instruction, socio-emotional guidance and

counselling, professional development, and program evaluation. The organization describes these domains as follows (<http://www.nagc.org/index.aspx?id=546>):

- **Program design:** The development of appropriate gifted education programming requires comprehensive services based on sound philosophical, theoretical, and empirical support.
- **Program administration and management:** Appropriate gifted education programming must include the establishment of a systematic means of developing, implementing, and managing services.
- **Student identification:** Gifted learners must be assessed to determine which educational services are appropriate for them.
- **Curriculum and instruction:** Gifted education services must include curricular and instructional opportunities directed to the unique needs of the gifted child.
- **Socio-emotional guidance and counselling:** Gifted education programming must establish a plan to recognize and nurture the unique socio-emotional development of gifted learners.
- **Professional development:** Gifted learners are entitled to be served by professionals who have specialized preparation in gifted education, expertise in appropriate differentiated content and instructional methods, involvement in ongoing professional development, and who possess exemplary personal and professional traits.
- **Program evaluation:** Program evaluation is the systematic study of the value and impact of services provided.

In the U.K. as well, criteria for effective and efficient promotion of the gifted have been subject to discussion. The *National Quality Standards in Gifted and Talented Education*<sup>3</sup> relate to the following five education components:

- **Effective teaching and learning strategies** comprise standards for identification of the gifted, for effective provision in the classroom, and for the achievement levels they are expected to attain.
- The area of **curriculum** calls for individual ways of learning and for the choice of study opportunities.
- **Assessment** for learning includes standards for assessing learning progress and for communicating them to other educational institutions involved (e.g., during transfer and transition from primary to secondary school).

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<sup>3</sup> Department for Children, Schools and Families (2007). *National Quality Standards in Gifted and Talented Education. User Guide*. London, UK: Mouchel Parkman.

- **School organization** includes specifications such as naming responsible persons, formulating a mission statement related to promoting the gifted and talented, and a school ethos which supports achievement and commitment. It also includes standards about the professional development of persons involved in giftedness education, about resources, and about monitoring and evaluation.
- The fifth area, concerning **partnership beyond the school**, comprises specifications about engaging with the parents, the community, and with institutions offering learning opportunities beyond the classroom for the gifted and talented.

Each standard is presented at three levels: entry, developing, and exemplary level. Schools can evaluate their current status according to the standards and set their own developmental goals for the individual areas. We have to assume that in the German-speaking countries, only very few schools will be able to achieve this level in more than one area at once.

## **2. Standards for Teacher Training**

In the US, standards for teacher training in gifted education have been developed on the initiative of the *Council for Exceptional Children*. Numerous stakeholders were involved in their development, above all the *National Association for Gifted Children*, so that these efforts resulted in a list of criteria which, also because of their sound empirical basis, has been accepted as binding by the *National Council for Accreditation for Teacher Education (NCATE)*. Thus, US American tertiary education institutions have to align their educational programs to given quality standards and are assessed according to them.<sup>4</sup>

These ten standards are not only geared to the tasks teachers are confronted with when dealing with differentiated education, but also towards the particular situation of the multi-ethnic American society. For instance, „diversity“ is an issue which is addressed by 27 out of the 70 criteria. With respect to the conditions in Europe, this seems a bit exaggerated; on the other hand, it has to be acknowledged that in the discussion about gifted education in Europe, ethnic minorities or other special subgroups have yet hardly played a role at all. With the promotion of girls and women being the only exception, giftedness education is considered a program for minorities by itself and thus reduces the discussion about minorities to the issue of ability level.

The above-mentioned standards for teacher training are concerned with the outcomes exclusively. They phrase partial competencies, which are further differentiated into the

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4 VanTassel-Baska, J. & Johnsen, S. K. (2007). Teacher education standards for the field of gifted education: A vision of coherence for personnel preparation in the 21st century. *Gifted Child Quarterly*, 51, 182-205.

knowledge base and skills teacher training programs have to impart. Thus, the following knowledge and skill areas can be distinguished:

- Fundamentals of scholarly work
- Learner development and characteristics
- Individual differences
- Teaching strategies
- Learning environments and social forms in class
- Language and communication
- Lesson planning
- Measurement
- Professional and ethical practice
- Collaboration with others

This list of standards is quite ambitious. No information is available as to the time required to impart all 70 criteria.

With respect to their conception and complexity, the standards proposed by iPEGE presented in this booklet are geared to advanced degree programs at Master's level. Thus, compared to the above mentioned standards, very basic and regional skills and standards of knowledge have been excluded.

### **3. Standards for Providers of Teacher Trainings**

Teacher training programs are offered by diverse providers. Such programs can be strongly formalized and accredited, as is the case with advanced degree programs at public and private universities; certificates can also be issued by less qualified institutions, which puts their value into perspective. Or they can simply consist in one-shot educational measures which, due to their specificity and brevity, do not offer any confirmation at all of the knowledge that has been acquired during the course.

Programs that promise to qualify their participants for gifted education by providing an intensive (and thus usually expensive) educational program should therefore be measured by the same quality criteria that are applied to tertiary education training. Such standards, for instance, have been agreed upon by the European Network for Quality Assurance in Higher Education (ENQA); their criteria for internal quality assurance are listed below<sup>5</sup>. In addition, criteria have been proposed for external quality assurance (evaluation) and for institutions providing for or organizing such (e.g., accreditation agencies).

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<sup>5</sup> European Association for Quality Assurance in Higher Education (2007). Standards and guidelines for quality assurance in the European higher education area. 2nd edition. Helsinki: Author.

In the following, the ENQA specifications will be presented:

„Based on the quality standards of the European Network for Quality Assurance in Higher Education (ENQA), institutions providing advanced degree programs at Master's level in the area of gifted education should fulfill the following quality criteria:

- Institutions should have a policy and formal procedures for the establishment of programs. These procedures should include possibilities to assess the educational program (that is, the degree program) with respect to the relevance of its goals, the fit between study contents and these goals, and to the availability of necessary resources. The program quality has to be evaluated periodically, with the involvement of external auditors. Evaluation results must be documented.
- Students should be assessed using standardized evaluation scales. Achievement expectancies and evaluation criteria should be published and applied in a consistent and fair way. Procedures should be established for the case that students should consider their evaluation to be unfounded and request a revision.
- Institutions are expected to provide their students with the resources necessary to successfully accomplish the study program. This includes learning material, qualified staff, teaching and supervision time, and classrooms with adequate equipment.
- Institutions should establish standards for the qualification of their teaching staff and abide by them. These standards are to be published. It is recommended to periodically assess the staff's qualification by third-party evaluators.
- When conducting a program, institutions are supposed to gather the information which is necessary for an effective program organization. The responsible persons are to acknowledge this information regularly in order to ensure the proper execution of the program.
- The program contents, the conditions of its execution, information about the staff involved and the qualifications thus achieved are to be published in a periodical, complete, and always up-to-date way.“

These specifications are relatively straightforward but can nevertheless be of help to distinguish qualified from less qualified providers. Qualified providers can be characterized as follows: They have developed a quality assurance system and make their rules accessible to the public. Their study programs and examination regulations have been enacted in a formal process and are reviewed periodically. Students are assessed using published criteria, regulations and procedures which are applied consistently. Staff involved with the teaching of students are qualified and competent to do so, and the assessment of their qualification involves external reviewers, thus more objective evaluation. The stu-

dents are provided with adequate and sufficient learning resources; all other resources, such as space for study, are adequately provided for.

## 4. Conceptual Issues

The meaning of "giftedness" is far from being consensual. In order to avoid misunderstandings, the authors of this booklet have therefore agreed on a common understanding of some important basic terms. The following paragraphs will describe these terms and relate them to each other. They also constitute the rationale for fostering giftedness and for the contents of some areas of competence which are important in the context of qualification standards.

**People** relate to their **environments** through their educational, developmental, and learning potentials. Thus, a **life-long interaction** is established, in which individuals influence and change their environments and vice versa. Through this interaction between natural and self-organizational abilities of the individual (which, in part, are based on previous learning experiences) and his or her environment, the gifts and talents of the individual, his or her potential for achievement, develop.

However, **achievement** is defined not only in terms of performance, its measurability and its exploitability. Achievement rather describes a person's possibilities, which are realized not only while attending school, but throughout the course of her or his life. Achievement, in this extended sense, comprises personal life scripts as well as active participation in society and thus becomes a life-task.

Generally, **giftedness** is defined as the overall ability to achieve. In particular, giftedness means the degree to which the achievement-related possibilities of an individual have yet been developed, that is, the developmental stage of those conditions which, given adequate dispositions and long-term systematic stimulation, enable the individual to act in a meaningful and responsible way and to perform demanding activities in areas his or her respective culture considers valuable.

In colloquial terms – and also in the terminological tradition of educational studies –, a gifted individual is a person with an above-average disposition for achievement and superior educational potential. „Above-average" and „superior" are defined in relation to a relevant comparison group, e.g., the same age cohort, or students of the same age attending the same school form. The present text also defines **the gifted** as persons who, compared to their learning peers, show higher abilities to achieve and greater educational potentials (e. g. higher learning abilities, stronger thirst for knowledge, higher

learning pace), which implies the need for particular treatment in psychological, educational, and instructional terms.

The individual pattern of giftedness factors is also termed one's **personal giftedness profile**. This profile may change over a person's life course. Individuals control their development intrinsically. They are not passively exposed to environmental influences, but assimilate, influence, and shape them. Thus, a life-long developmental dynamics is established, which can considerably change a person's characteristic profile within a short time, but may also lead to stable long-term profiles.

**Intelligence** is an individual characteristic related to achievement. We understand intelligence as a general reasoning and learning ability, with respect to which individuals differ. The general ability to reason and learn can be further subdivided into several main factors of intelligence, e.g., the ability to handle verbal material, to deal with numbers and their relations, or with figural or spatial phenomena. Furthermore, numerous special factors with limited areas of influence are assumed to exist. What exactly constitutes the "nature" of intelligence is still unclear; at any rate, intelligence is defined by speed, accuracy, efficacy, and efficiency of mental activities. It can be assessed quite precisely through standardized tests and has a strong impact on academic and professional achievement.

Intelligence is a part of giftedness. It is still unclear whether concepts currently under scrutiny, such as "social intelligence", "emotional intelligence" or "existential intelligence", can indeed be considered autonomous types of intelligence or whether such strengths are not rather the result of an interaction between a person's general abilities, personality characteristics, and knowledge.

In any case, giftedness cannot be entirely reduced to intelligence, as superior **reasoning abilities** alone do not necessarily result in special achievements. There are further person-related factors of giftedness, such as the **will to achieve**, subject-related **interests**, **discipline at work**, **self-confidence**, and **self-regulatory abilities**. These factors, in concert with reasoning abilities, enable a person to learn and achieve. The overall interaction of these factors can be subsumed under the concept of **personality**, so that, in a larger sense, gifted education also means character building and thus personality development as well.

With respect to their abilities, individuals differ in the extent of their potential to achieve in academic, technical or practical, artistic, social-emotional or athletic domains. High potential in one of these domains is often labeled **talent**. However, differences in individu-

als' ability levels are also manifested in the extent of their general achievement potentials, which range from strong developmental impairments to extraordinary developmental possibilities. In order to decide whether an individual is gifted, his or her potential has to be assessed with respect to the different achievement domains and the above-mentioned ability factors. Therefore, when using an IQ-normed measure of general reasoning ability only, important diagnostic information will be disregarded.

There is no general agreement among researchers and practitioners as to the proportion of the highly gifted in the population or the question which cut-off value to apply. All pragmatic definitions in this area are arbitrary, and their appropriateness and usefulness has to be justified in each particular case. The popular view that giftedness requires a minimum IQ of 130, thus encompassing about 2% of the population, is no less arbitrary than other definitions, and restricts the nature of giftedness to a single factor. It would be more beneficial to take a person's individual needs for development and education as a starting point instead of using a rigid IQ limit.

Again we would like to point out that an important criterion for gifted education is the fact that the (highly) gifted and talented clearly distinguish themselves by their outstanding potential for superior and valuable achievements.

**Competence** is another concept which, in recent times, has frequently been associated with achievement. Competence comprises the entirety of an individual's prerequisites necessary for him or her to act confidently, flexibly, and successfully in a given achievement domain. Therefore, depending on the area to which the term is applied, competence can include basic abilities, personality traits, knowledge, automatized skills, and the like.

Educational institutions that emphasize the development of certain competencies sometimes define "**standards**" students are to achieve in those domains of knowledge and ability which constitute the targets for the respective competencies. The difference between competence and giftedness is that gifts constitute the potential which, provided adequate fostering, can be developed into competencies. These competencies, in turn, can then be considered the result of the development and deployment of gifts with respect to a certain domain they can be applied to and in which they can prove their value. Performance in these domains, in terms of observable (mental or motor) activities, then represents an individual's achievement. Establishing "standards" is an attempt to operationalize an individual's achievement at exerting these competencies.

## **5. Fostering Giftedness – Fostering the Gifted**

### ***5.1. General Principles of Gifted Education***

The promotion of gifted and talented children and youth in school and beyond has to ensure that education, instruction, specific programs, and interventions are organized according to the individual's **gifts and talents, motivation, and interests** as well as his or her acquired **skills and competencies**.

Schools in particular should choose such forms of organization, contents, methodology of instruction and learning processes that are conducive to the deployment and development of the special potentials and competencies of gifted and talented children and youth. This means, for instance, that the primary criterion for the selection of learning materials and methods and the composition of learner groups or classes is not chronological age, but rather **the individual's educational and developmental process and standing**, respectively.

When organizing such learning and developmental environments, findings from educational theory as well as empirical research findings on learning and giftedness should be applied in a comprehensive way. It is assumed that organizing school according to this principle can have a stimulating and potent effect on the entire educational system and thus for the education of students over the entire ability range.

### ***5.2. Organizing School for the Education of the Gifted and Talented***

There is no single silver bullet solution for the selection of forms or constructions in school development, but rather a **wide scope of possibilities**. Basically, common approaches to gifted education, such as acceleration and enrichment, have proven valuable; however, methods to develop character and personality have to be considered as well. Additional attention should be paid to the fact that, depending on the extent of individualization and differentiation, teaching and learning processes may also require guidance, coaching or mentoring of the students.

If the above-mentioned principles are realized, it becomes negligible whether students learn in **homogeneous ability or achievement groups** (e.g., classes of gifted stu-

dents or high achievers), in groups for children and youth having equal or similar interests, or in **integrative groups** of students with diverse interests and ability levels. Due to the wide range of interests and abilities found in any learning group or classroom, teachers, with respect to educational diagnostics and the continuous monitoring of educational and developmental processes, are required to adapt their teaching activities to the learning group's levels of ability, knowledge, motivation, and interest, and to monitor their students' development and successful learning in any classroom situation.

In the context of these monitoring activities and educational diagnostics, particular attention has to be turned to the identification of gifted minority students, gifted girls, or low-SES gifted students and to their subsequent inclusion into special programs.

### ***5.3. Educating the Gifted and Talented in School: Specific Issues***

It is useful to distinguish between the **promotion of giftedness** and **promoting the gifted**. Promoting giftedness can be understood as the systematic development of the fundamentals of giftedness, for instance, by stimulating reasoning abilities over a wide range of contents, building up a well-structured memory, or developing interests, goal-directedness, self-confidence, and communication skills. On the other hand, promotion of the gifted comprises efforts to identify and develop possible potentials of children and youth as well as the design of differentiated and demanding learning opportunities for those young people who have already proven their high ability level. If these abilities develop in a particularly favorable way, special programs for the gifted are required.

In order to develop educational programs for the gifted, the following findings, among other things, might be of use:

- Gifted students **grasp learning contents quickly and easily**. This allows for accelerated teaching without extensive repetition and practice.
- The fact that gifted students **handle acquired knowledge in a confident and flexible way** and **quickly master the common approaches** allows teachers to put less emphasis on the latter and to stimulate creative and original solutions.
- **Broad attention, wide interests**, and the **ability to interconnect diverse areas of knowledge** enable gifted students to deal with demanding and complex subjects and issues in depth.

- o **Special interests** of gifted students and their **personal striving for insight** call for guidance in self-directed knowledge acquisition processes, providing them with abilities to individually plan, explore, and synthesize areas of knowledge.
- o When **acquiring knowledge**, gifted students often go **beyond the school curriculum**. It is essential to provide these students with insight into effective approaches to knowledge acquisition in the respective domains. This concerns work and research methods as well as fundamentals of scientific discourse and achievement standards.
- o The more **individualized** the processes of knowledge acquisition become, the greater becomes the necessity of forms of **guidance**, of mentoring and coaching.

In detail, learning processes in the classroom, devised in concordance with the respective curriculum, should be geared to the following aspects:

- o to students' **ability levels**, including their developing **personality characteristics**;
- o to students' and parents' **wishes and interests**; allowing for the fact that taking responsibility for developing one's own interests may be a goal by itself;
- o to the **demands of the particular subjects and topics**;
- o to the **educational standards society expects** from its future generations.

#### ***5.4. Possible Implementations in the Classroom***

For the design and development of classes, this means that planning has to be based on individualization and differentiation – there is no generalizable solution for gifted programs. Depending on the requirements of the particular class and the gifted and talented children and youth, the following measures may be reasonable or even necessary:

- o **Internal differentiation of learner groups**, for instance by using methods of open or enhanced forms of teaching (appropriate study environments, workshops, project work, case studies, etc.) in order to offer gifted learners an extended curriculum of open learning tasks besides the mandatory ones. This should allow for

advanced guidance of interests, self-development, development of multimodal ways of self-expression, individual organization of learning time, and dealing with a subject in depth.

- o **Differentiation of learning goals:** Individualized learning goals (weekly goals, goals concerning stages of learning) can relate to subjects, but also to learning methods, individual work habits, social and communicative skills, or individual interests (self-study, project work), which will allow students to develop self-efficacy, provided they also take their share of the responsibility.
- o **Guidance of interests:** Besides normative educational demands, the gifted and talented require stimulation and space for self-study and individual projects. Suitable measures to accompany project work are, for instance, the agreement on objectives, study guidance, development of advanced learning strategies, development of self-directed learning abilities, reflection of one's own learning and educational process, presentation of one's results, and reflection on it.
- o **Demanding and complex problems;** opportunities to work on advanced subject-related tasks and problems within subject areas and classes.
- o **Modular presentation of teaching and learning contents:** Some learning contents are well suited for gradual and self-directed acquisition, and for autonomous practice of contents (e.g., with the help of a math plan or a guiding introductory text). This enables students to work independently of time constraints and to prove their mastery of learning goals at an early stage (by taking individual exams as soon as contents are mastered). This enhances students' motivation, allows them to experience self-efficacy and gives them additional time for advanced learning activities.
- o **Educational diaries, developmental or talent portfolios** to describe successfully or also less successfully reached goals and to document mastery and attainment of individual learning goals, achievements, and reflections about learning processes. These diaries and portfolios can also serve as a basis to reflect one's own educational process, or as starting point for individual diagnostics and promotion of learning.
- o **Exemption from single class units or parts of it:** Students who have already mastered the learning goals of a class are free to work on individual projects, which allow them to expand their current ability and skill levels – based on the

current class, contents of optional classes from within school or from regional programs for the gifted.

- o Development of **self-monitoring skills** in learning processes and of the ability to perceive and understand one's learning processes and behavior in the classroom or in society.
- o With respect to **performance evaluation**, the preceding interventions point to the need for methods which go beyond traditional forms of assessment of scholastic achievement, such as, for instance, the above-mentioned educational journals or portfolios. However, it should be avoided to turn too many learning situations into performance evaluations.

### ***5.5. School Programs and Interventions beyond the Classroom***

- o **Additional programs guided by supply and interests**  
Beyond individual classes, giftedness as well as the gifted and talented can be fostered through additional programs guided by supply and interests. In most cases, these measures consist of external differentiation within the school community, but go beyond individual classes and study groups.
- o **A learning culture in the schoolhouse promoting giftedness**  
A learning culture that promotes giftedness allows special achievements to be presented in an adequate context (e.g., presentations, performances, public announcements, etc.). These achievements are valued by learners as well as teachers.
- o **Special grouping; workshops for the gifted and talented**  
Interest and ability grouping represent specific ways of promoting learners beyond their grade level that measure up to their capacities and above-average abilities. Pull-out programs enable students to work on their own projects which are based on their special interests and abilities. A learning coach supervises the children's learning progress and assists them in acquiring self-directed learning skills and strategies for advanced study, work, and presentation. In this context, creating opportunities for the gifted to collaborate with students of similar abilities, interests, and demands is particularly important.
- o **Resource rooms; laboratories**

Resource rooms provide the gifted with opportunities to work on individual projects, with or without guidance from their teachers. Resource rooms offer selected and particularly demanding learning materials, room for experiments, and information resources which serve the goal of selectively promoting cognitive or domain-specific abilities. The resource room thus constitutes a work environment for realizing demanding individual projects.

- o **Mentoring**

Schools often do not have the possibilities to sufficiently promote extraordinary or particular gifts and talents, e.g., musical abilities, specific social engagement, artistic, special scientific, or language abilities. External mentors and experts represent another resource for the fostering and guidance of the gifted and talented.

## ***5.6. Promoting the Gifted and Talented Beyond School***

Promoting giftedness and the gifted cannot and must not be restricted to scholastic contexts alone. It is impossible for schools to cover all areas of giftedness and talent; and to a certain extent, due to historical reasons, educational structures do exist outside the classroom, such as music schools, music academies, and sports associations. External institutions offering advanced education programs are becoming increasingly aware of a demand for the specific promotion of the gifted and talented. These include, for instance:

- o Sports clubs and associations (high-performance sports)
- o Private providers: Specific provisions for the gifted in areas such as dance, theater, languages, etc.
- o Music academies (with partial exemption from regular classes)
- o Children's University, summer academies, and holiday camps for the gifted and talented
- o Competitions
- o Mentors from outside the school (novice-expert relationships)
- o Internet-based fostering of the gifted and talented (programs for the gifted, Open University, math support, Renzulli Learning System, etc.)
- o Early University Entrance Programs

When offering the above-mentioned programs or initiatives, schools and external institutions should not only cooperate but also systematically coordinate their activities and establish a structural network where appropriate.

Differentiated interventions to promote the gifted and talented through initiatives beyond the school context do in no way contradict the inclusion of these students. The main goal of inclusive education, which is to foster each individual according to his or her possibilities and abilities, should first and foremost be carried out in the classroom.

### ***5.7. Personality Development***

Promoting the gifted and talented is not limited to knowledge transfer and the acquisition of skills. In terms of a comprehensive fostering of personality development, competences related to dealing with oneself and with other people as well as goal and value orientations need to be given space for development. Learning arrangements with groups of like-minded and equally able young people, combined with knowledgeable guidance by accepting, stimulating and socially appealing teachers, are particularly important in this context.

### ***5.8. Teacher Education***

The above-mentioned requirements for the promotion of giftedness and the gifted have consequences for basic teacher training, in-service training and further education of teachers. These claims will be discussed more in depth in Chapter 6, "Challenges in Dealing with Gifted and Talented Students in Educational Contexts". They constitute the basis for specific proposals for teacher education.

Many (though not all) demands on teacher education aiming at the optimal promotion of gifted children and youth are equivalent to the claims which educational theorists have been making for a long time, as well as to those raised by current empirical educational researchers. In the course of support programs and initiatives for the gifted and talented, these suggestions are taken up again, gaining new practical relevance for teachers.

## **6. Challenges in Dealing with Gifted and Talented Students in Educational Contexts**

### ***6.1. All Teachers Are Teachers for the Gifted and Talented***

The regular classroom is the primary educational environment where gifts and talents can be promoted. This stance reiterates the view that education in class should enable all learners to develop their abilities and resources; it also reflects the ideal of inclusion, which aims at the organization of learning and participation in an undivided community. The gifted and talented should be accepted in and integrated into the learning communities of their (naturally) heterogeneous classes. In such diverse groups, they learn to develop their individual profiles within a larger entity, to contribute to a community, and to practise solidarity. This does not contradict the necessity of additional fostering.

However, promoting giftedness and talent within the regular classroom requires greater competencies on the part of the teachers. The tasks they will be confronted with (and for which they need to be prepared accordingly) include:

- o **Identification** of special gifts, talents, and high achievements (also including hidden, domain-specific, and nonverbal abilities)
- o **Within-class grouping** (including differentiation of learning goals, working with individualized and open learning methods, and independent project work)
- o **The design of learning environments** which provide demanding and challenging learning opportunities for different skill and ability levels
- o **The implementation of classes** which are neither geared to fictitious "norm children" nor to the traditional stance that all children have to learn the same things at the same time requiring an equal amount of time, but which rather take into account that the learners and their individual learning abilities interact with normative educational demands.
- o Guidance in the development of autonomous, reflexive, and responsible learning (**development of self-directed learning competences**)

- o **Assessment of achievement** incorporating individual learning prerequisites and processes, and **personalized study guidance** within the existing classroom
- o **Continuous professional development** regarding aspects of giftedness, its developmental conditions and ways of expression (including gender aspects, risk groups such as underprivileged students, non-native speakers, minorities, under-achievers, etc.).
- o **Creating a learning climate** in which both learners and teachers recognize and appreciate individual success and high achievement, and in which people are motivated to tap their full potential.

Traditional teacher training reflects these increased requirements for professional competence to a limited extent only. These requirements may be said to be qualities of the teaching profession that have only in recent years become the center of attention in educational studies, and which require an increased awareness and reflection of one's own professional practice and the teaching profession in general.

Since awareness for these issues is increasing, it can be assumed that, in the long run, basic teacher training will contribute to a changed understanding of teaching, learning, and achievement, and will also sensitize prospective teachers to aspects of giftedness and talent. There is, indeed, an urgent need for in-service teacher training programs targeted at subject and class teachers that will enable these teachers to adequately react to the pressure exerted by parents and society and to assume these newly evolving educational responsibilities.

## ***6.2. The Extended Field of Giftedness Specialists***

Since the promotion of the gifted and talented cannot be restricted to learning and teaching in a more or less fixed social environment in the classroom, additional learning and educational programs have to be devised and organized which allow the gifted to develop their above-average (general or domain-specific) potentials. Developing such advanced programs, e.g., workshops for the gifted, supervised research groups, individual or group projects, but also mentoring systems (with mentors from within and without school) can contribute to external differentiation within the school community.

One of the crucial tasks in the field of gifted education is the development of a school culture that welcomes diversity, promotes individuality and character development beyond class and, at the same time, cultivates a sense of community. A school which promotes gifts and talents will facilitate this by integrative as well as separative opportunities for learning, which will complete and reinforce each other. In such learning situations, peer groups of highly gifted students assume an important role for the development of their sense of identity, motivation, and stimulation.

Experience has taught us that linking these issues to a **responsible specialist** at school is an important condition for successful school development. Designing and implementing a concept for the support and promotion of the gifted within the school community, together with colleagues and other responsible persons at school, is one of the crucial tasks of this specialist.

Depending on the organizational structure of the school, the field that giftedness specialists work in beyond regular class comprises the following functions:

- **Implementation of advanced learning and educational programs**  
Gifted and talented children are grouped by interest or ability level beyond their own class and grade and are offered specific fostering (within the school or the region) which measures up to their developmental level and their above-average abilities. Giftedness specialists, qualified as learning coaches, guide children and youth in their learning processes and support their acquisition of self-directed learning abilities, self-regulatory skills, advanced learning and work strategies, and presentation skills.
- **Support for class and subject teachers** with respect to teaching, working with the gifted and talented and their guardians, with particular respect to methodological and instructional issues of giftedness education and individual support in learner groups.
- **Subject-specific training and professional development** for teaching teams, for teaching staff in general, and for other groups in education programs within the school, the community, or the entire region; raising awareness and imparting the knowledge and skills necessary for the promotion of the gifted and talented.
- **Assessment of particular gifts and talents and identification of the gifted** in collaboration with school psychologists: identification, diagnostics, and further clarification (tests, interviews, behavior observation in class, assessment of learn-

ing progress, learning biographies, and perspectives). Since the realization of high achievement is not only based on special gifts and talents but also depends on a multi-factorial environment and the interaction of both within the school system, the latter has to be included into the diagnostic process. It is important that the first steps of such a multidimensional identification of giftedness be offered on site (including the current learning environment) so that identification is easily accessible at all times of the learning process.

o **Supervision of persons and learning processes**

The giftedness specialist transfers results from (pedagogical and psychological) identification procedures into educational recommendations, goals, and methods relevant to action for promoting the gifted and talented. Since high achievement develops dynamically, developmental guidance, based on educational diagnostics, and a corresponding supervision of the educational process and the phenomena accompanying it (including social issues) may be necessary interventions.

o **Counseling of parents and school authorities**

Institutions offering guidance and counseling reveal a strong need for counseling, which should ideally be offered within a school's learning system and thus provide support for devising specific learning situations. Not only parents and guardians need counseling: School administration boards and authorities also require information and specialist expertise as a basis for responsible and professional decision-making and competent action.

o **Program responsibility and coordination**

The school's giftedness specialist is responsible for the implementation, advancement, and formative evaluation of programs for the gifted and talented at his or her school. He or she also has to coordinate the different measures. Furthermore, the giftedness specialist coordinates the gifted identification procedures between the different persons involved and submits applications for students' admission to the various programs to the school administration. In addition, he or she supervises the learning processes of the program participants and the results they achieve. This comprises coordination activities between teachers, guardians, and other persons involved in the particular programs.

o **Maintaining a network of mentors**

As mentioned before schools often do not have the capacities to sufficiently promote particular and extraordinary abilities, e.g. musical abilities, specific social engagement, special artistic, scientific or language abilities. The school's gifted-

ness expert establishes contact to specialists and mentors outside the school and supervises this network in a professional way. He or she ensures the integration of school programs and support programs beyond school.

- o **Networking with regional and national programs**

The giftedness specialist ensures that the school's program for promoting the gifted and talented is linked with other regional and national programs (competitions, summer academies, etc.), measures offered by private persons and institutions (e.g., artists, foundations), and programs offered by universities and economy, and is thus embedded in a network targeting the promotion of the gifted and talented.

- o **Giftedness specialists actively work for the advancement of adequate programs** in their schools, but also in regional and national networks and working groups. They actively participate in ongoing developments and make sure their schools and school districts do not lose track.

### ***6.3. Professional Development as a Prerequisite for School and Instructional Improvement***

Teachers and schools are challenged to conform to these newly formulated requirements in a professional way and to improve their expertise with respect to noticing and identifying outstanding abilities and achievements and to promoting them. This calls for corresponding educational and instructional concepts.

Considering the above-mentioned general prerequisites concerning the two levels of school and instructional development, we can assume a need for education and professional development for the following reasons:

First, class and subject teachers urgently require additional support with respect to specific instructional design when dealing with diversity and individualization. Second, school development processes require a staff of experts specially trained in gifted education.

This, for one, suggests that as many teachers as possible should have access to broadly based, low-threshold professional development programs (i.e. professional development in their traditional teaching professions). At the same time, there is a growing need for specialized professional development programs targeted at giftedness experts (post-

graduate or master's level) which enable the participants to adequately develop and fulfill the demanding functions concerning their different areas of competence (subject matter, coordination, supervision, leadership abilities, and counseling skills) in the quickly changing field of current educational reforms. In order to achieve this, it is necessary to develop the competencies which will be described in the following chapter.

## **7. Qualification Standards: Competencies and Learning Goals**

The standards below list the competencies that educators, teachers, psychologists, and other persons concerned with the education and schooling of gifted and talented children and youth should have at their command. Partly, they are directly derived from the tasks mapped out in Chapter 6.

Please note that the competencies listed below are not equally important for all persons concerned with the education of the gifted and talented. The competencies as given in the individual areas below represent educational goals which differ in significance for the diverse groups of people concerned with the gifted and talented, e.g., teachers, project leaders, counselors, school principals, or evaluators. In part, these competencies should overlap with what is required by the standards for basic teacher education; other, more specific competencies can be taught in professional training programs. We did not mention competencies which are (or should be) part of the education of all teachers, e.g., diagnostic abilities in the assessment of scholastic achievement, or fundamentals of instructional design. Thus, the standards mentioned here are of particular importance for professional development programs.

The diverse competencies and skills are organized by content areas. The individual domains include different competencies (knowledge, evaluation, action, social skills).

### ***7.1. Area of Competence: Basic Knowledge about the Current State of Research on Gifted and Talented Children and Youth***

- o Extended knowledge and reflection of educational and pedagogical theories of giftedness and their impact on personal educational processes;
- o Extended, reflected knowledge about educational-psychological models of giftedness and talent;
- o Reflected knowledge from differential psychology and differential developmental psychology, especially about the development of giftedness and talent and the fundamental factors that influence it (including influences of social class, educational environments and institutions, migration background, gender, etc.);

- o Ability to use this knowledge to analyze the living conditions of gifted children and youth, including underachievers, and to identify and promote them.

**Sample Contents:**

- o Theories and models of intelligence, creativity, and giftedness;
- o Models of the relationship between competence and achievement and of its development, including expertise research and the role of creativity;
- o Models of the relationship between fundamental theories and their application to the identification and promotion of the gifted.

**Prerequisites:**

Psychological and educational knowledge as imparted in basic teacher training and as formulated, for instance, in the standards of the Conference of the German cultural ministers or in the proposal of the German Society for Educational Science (Deutsche Gesellschaft für Erziehungswissenschaft, DGfE).

These competencies are essential for all activities related to the identification, promotion, instruction, and education of gifted and talented children and youth.

**7.2. Area of Competence: Scholarly Work and Research Methodology**

- o Working knowledge of educational and psychological research and evaluation, as well as
- o the ability to use this knowledge for independent planning, implementation, and interpretation of the results of small research projects.
- o For tertiary education (doctoral level), further methodological and statistical knowledge may have to be imparted.

**Sample contents:**

- o Current paradigms, fundamentals of scholarly work, literature research and documentation, methodology (including simple statistical methods);
- o For tertiary education (PhD studies): mastery of common (simple) methods of descriptive and inferential statistics (analysis of variance, repeated measures designs), and an outlook on more complex procedures such as structural equation modeling or latent models (which can be imparted more in depth within the context of a doctoral program).

**Prerequisites:**

Working knowledge of probability theory and statistics (secondary school level), or elementary methodological knowledge as imparted in the context of educational-psychological diagnostics in teacher training courses.

These competencies and skills are required

- o to be able to read, understand, integrate, and critically evaluate research texts (e.g., about specific interventions),
- o to independently plan, conduct, and interpret simple evaluations of self-developed programs realistically,
- o with respect to doctoral studies: to be able to conduct empirical research as part of a dissertation project.

**7.3. Area of Competence: Assessment and Identification**

- o Ability to supervise and assess the learning processes of gifted and talented children and youth;
- o Knowledge of different methods to identify (general or domain-specific) giftedness and talent;
- o Ability to critically evaluate the information content of these methods;
- o Ability to apply these methods responsibly, flexibly, and correctly, also within the context of programs for the gifted and talented.

**Sample contents:**

- o Behavioral characteristics of (highly) gifted children and youth;
- o Quality characteristics of diagnostic methods used in pedagogical and psychological assessment;
- o Pedagogical and psychological methods to identify gifted and talented children and youth;
- o Operationalizing models of giftedness in regard to pedagogical and psychological methods of identification and assessment;
- o Diagnostic processes and sources of error.

**Prerequisites:**

Knowledge of the assessment of scholastic achievement (including methods such as simple forms of behavior observation, ratings, portfolios, etc.) as imparted in the context of educational-psychological assessment in teacher education university programs (psychology, educational studies) and in the practice-oriented part of teacher education.

These competencies and skills are required

- o to identify giftedness and talent in a professional way,
- o to identify gifted underachievers and gifted children and youth from risk groups
- o to plan and implement adequate measures to promote giftedness and talent, based on a solid assessment of a child's or youth's prerequisites and conditions for learning,
- o to constantly monitor skill and ability levels, learning progress, changes in conditions for learning, etc., in individuals and groups,
- o and thus to optimize promotion and counseling of the gifted and talented in school.

#### ***7.4. Area of Competence: Teaching and Learning with the Gifted and Talented***

- o Advanced knowledge of instruction and methodology for promoting giftedness and teaching the gifted and talented at school and beyond;
- o Ability to put this knowledge to use in classes or study groups of gifted and talented children and youth;
- o Ability to develop individual curricula for high-ability learners;
- o Ability to evaluate instructional procedures and methods with regard to their adequacy for gifted and talented children and youth;
- o Ability to assess interests, needs, and wishes of gifted and talented youth and to integrate them into lesson planning and implementation;
- o Ability to consider giftedness as a resource for both the individual and society, and to show appreciation for gifted and talented children and youth.

#### **Sample contents:**

- o Learning theories, including approaches from constructivism, neuropsychology, and expertise research;
- o Integrative and separative concepts of promoting the gifted;
- o Dealing with diversity, individualization, and self-directed learning, along with knowledge of corresponding instructional methods and ways to organize learning processes (e.g., independent learning, project-related studies, self-study, etc.);
- o Designing learning environments;
- o The role of the teacher, including reflection of one's own possible role;
- o Methods of enhanced performance assessment and judgment (e.g., Total Talent Portfolio, learning journals);

- o Enrichment and acceleration measures;
- o Pull-out programs, extracurricular promotion of the gifted and talented.

**Prerequisites:**

Proficiency in lesson planning and teaching methods, as imparted in the first (university or college studies) and second part of teacher education (provisional teaching period, teacher traineeship); furthermore, practical teaching experience.

These competencies and skills are required

- o to teach gifted and talented children and youth so they can optimally profit from instruction,
- o to be able to plan and implement curricula and learning arrangements, and
- o to assist other teachers in teaching gifted and talented children and youth.

**7.5. Area of Competence: Fundamentals of Counseling and Individual Case Support**

- o Ability to analyze emotional and social aspects of asynchronous or impaired development in gifted and talented children and youth, as well as aspects relating to their psychology of learning;
- o Ability to realize and implement individual interventions and supportive educational measures. This includes:
- o Practical communication and counseling skills required for creative problem solving with gifted and talented children and youth and their parents;
- o Sensitivity for the specific problems of individuals seeking counseling;
- o Knowledge of how gifted and talented children and youth are integrated into their social networks and systems.

**Sample contents:**

Adequate knowledge of theories and empirical research findings on:

- o learning environments, with a special focus on peers,
- o underachievement,
- o deviant behavior and behavioral problems,
- o gender,
- o migration background,
- o interpersonal communication skills,
- o single case analyses,
- o as well as practical counseling experience.

**Prerequisites:**

Knowledge of individual learning and achievement development, as imparted in the first (university or college studies) and second part of teacher education (provisional teaching period, teacher traineeship); furthermore, practical experience in dealing with students and parents.

These competencies and skills are required

- o to identify gifted and talented individuals (particularly those whose ability and achievement development has been problematic),
- o to counsel, and
- o to be able to adequately foster children and youth in need.

**7.6. Area of Competence: Instructional and School Development**

- o Ability to implement and supervise school programs for the gifted and talented;
- o Ability to adapt gifted and talented programs to local particularities;
- o Ability to further develop one's school towards greater acceptance and appreciation of giftedness and talent;
- o Building and using institutional networks committed to the promotion of gifted and talented children and youth.

**Sample contents:**

- o Best practice models, structures (instructional and school concepts) to specifically promote giftedness and the gifted and talented, including developmental aspects;
- o Fields of school development (cooperating with parents, establishing counseling networks, team building activities, etc.);
- o Contexts and prerequisites of school development and its evaluation;
- o Practical experience with school development projects.

**Prerequisites:**

Apart from the knowledge gained during studies and teacher traineeship: practical experience as a teacher with colleagues and school board members.

These competencies and skills are required

- o to initiate,
- o plan,
- o implement,
- o and evaluate qualified school development projects.

The following matrix integrates both the different tasks teachers have to fulfill with respect to the promotion of the gifted (see chapters 5 and 6) and the competencies and learning goals which have been outlined in chapter 7. Each row indicates the competencies that are required to fulfill each task. For instance, in order to be able to spot giftedness, talent, and high achievement, an individual should be qualified with respect to the first, third, fourth, and fifth competency. This matrix also reveals that basic competencies represent a necessary requirement for almost any area of competence, and that proficiency in all areas of competence is required in order to fulfill all kinds of tasks.

**Table: Tasks and Areas of Competence – Teacher Professionalization**

	<b>Basic knowledge about the current state of research</b>	<b>Scholarly Work and Research Methodology</b>	<b>Assessment and Identification</b>	<b>Teaching and learning with gifted and talented children</b>	<b>Fundamentals of counseling and individual case support</b>	<b>School and Instructional Development</b>
<b>Identifying giftedness/ talents and high achievement</b>	X		X	X	X	
<b>Differentiated instruction in class</b>	X		X	X		X
<b>Designing learning environments</b>	X			X		X
<b>Person-related assessment of achievement</b>	X		X	X		X
<b>Developing competencies for self-directed learning</b>	X			X	X	
<b>Creating a positive learning climate</b>	X			X	X	X
<b>Conducting advanced learning and educational programs</b>	X	X		X		X
<b>Supporting class and subject teachers</b>	X					X
<b>Training and further education of the teaching staff</b>	X					X
<b>Observing and guiding learning processes and persons</b>	X	X	X	X	X	X
<b>Counseling parents and school administrations</b>	X		X		X	
<b>Responsibility for and coordination of programs</b>		X				X
<b>Maintaining a network of mentors</b>						X
<b>Networking with regional and national programs</b>						X

<b>Furthering development of adequate programs in schools</b>	X	X				X
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## 8. Qualifications of Second-Cycle Graduates (Master's Level)<sup>6</sup>

With the so-called '**Dublin' Descriptors** in 2004, a joint initiative for quality assurance and accreditation of Bachelor's and Master's programs in Europe published a compilation of multidisciplinary capabilities graduates from diverse professional development programs are supposed to acquire during their studies. Those descriptors are part of the Bologna Framework for Qualifications of the European Higher Education Area and describe the different levels of competence in the educational process.

The areas of competence in giftedness education and research described in this brochure also target the acquisition of these basic abilities. **Qualifications** that signify completion of the second cycle (Masters' level) should therefore only be awarded to students who

1. have demonstrated knowledge and understanding that is founded upon and extends and enhances what is typically associated with Bachelor's level, and which provides a basis for **originality** in developing and applying ideas within a **research-based educational context**;
2. can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within **broader or multidisciplinary contexts** related to their field of study, and can **adapt these abilities** to specific cases and situations;
3. have the ability to **integrate knowledge**, handle complexity, formulate judgments with incomplete or provisional information, and bear in mind the **social and ethical responsibilities** linked to the application of their knowledge and judgments;
4. can **communicate their conclusions**, and the **knowledge** and **rationale** underpinning them, to specialist and non-specialist audiences clearly and unambiguously;
5. have the learning skills and strategies to allow them to continue **learning** and **studying** in a largely **self-directed or autonomous manner**;

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<sup>6</sup> Quoted according to the Dublin Descriptors. See <http://www.jointquality.nl>

6. and who are able to **reflect and evaluate their own professional practice** as well as the **beliefs** and theories underlying it.

## 9. Proposals for Training Programs

The areas of competence stated in chapter 7 can serve as guidelines for various training courses and programs. Besides assuring the quality of the institution that offers the program, it is important to teach the above-mentioned areas of competence in adequate scope using suitable instructional formats. The following might serve as helpful suggestions.

**Advanced training courses (60 ECTS points)** with a strong focus on practical skills (1800 hours of work load) could be structured as outlined below. The individual governmental requirements have to be taken into account, respectively.

- „Basic knowledge about the current state of research“ (6 ECTS points)
- „Assessment and identification“ (6 ECTS points)
- „Teaching and learning with the gifted and talented“ (18 ECTS points)
- „Instructional and school development“ (12 ECTS points)
- „Fundamentals of counseling and individual case support“ (6 ECTS points)
- Thesis (12 ECTS points)

The three areas „Teaching and learning with the gifted and talented,“ „Instructional and school development,“ and „Fundamentals of counseling and individual case support“ yielding 36 ECTS points altogether could also be used for specialization, so that 6 ECTS points can be earned for each of the two minor subjects, and 24 ECTS points for the specialization area.

**Advanced training courses (90 ECTS points)** comprising more scientific aspects could be structured as follows:

- „Basic knowledge about the current state of research“ (6 ECTS points)
- „Scholarly work and research methodology“ (12 ECTS points)
- „Assessment and identification“ (12 ECTS points)
- „Teaching and learning with the gifted and talented“ (18 ECTS points)
- „Instructional and school development“ (12 ECTS points)
- „Fundamentals of counseling and individual case support“ (12 ECTS points)
- Thesis (18 ECTS points)

**Advanced training courses (120 ECTS points)** with a strong scientific focus could be structured as follows:

- „Basic knowledge about the current state of research“ (12 ECTS points)
- „Scholarly work and research methodology“ (18 ECTS points)
- „Assessment and identification“ (12 ECTS points)
- „Teaching and learning with the gifted and talented“ (12 ECTS points)
- „Instructional and school development“ (12 ECTS points)
- „Fundamentals of counseling and individual case support“ (12 ECTS points)
- „Practical implementation“ (6 ECTS points)
- „Individual in-depth study“ (6 ECTS points)
- Thesis (30 ECTS points)

The four areas „Assessment and identification,“ „Teaching and learning with the gifted and talented,“ „Instructional and school development,“ and „Fundamentals of counseling and individual case support“, comprising 48 ECTS points altogether, could also be used for placing emphasis so that the two minor areas yield 6 ECTS points, respectively, compared to 30 ECTS points for the major.

## **10. Future Prospects**

With this booklet, the representatives of iPEGE have attempted to clarify scientific concepts and background knowledge about giftedness and talent. We have declared our goals and positioning, described the requirements on agents, institutions, and specialists who wish to promote giftedness and talent, and proposed standards and learning goals for the development of educational components in tertiary education. Thus, for the first time, an expert group, bringing together members from Germany, Austria, and Switzerland, has proposed a joint statement to contribute to the promotion of the gifted and talented in the three countries – and soon beyond.

Through our work, we hope to further raise awareness of how important it is to promote the gifted and talented, and to encourage the persons in charge at universities and colleges to provide for the education of specialists in this field. We intend to continue our work and to increase the number of experts in the panel.