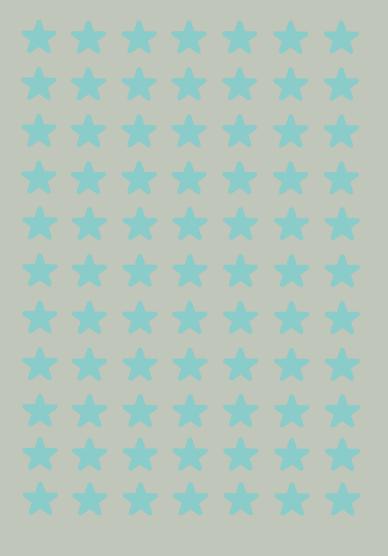


Frequently Asked Questions (FAQs)





Authors: Franzis Preckel,
Miriam Vock, & Christine Koop

### Contents

- 4 Introduction
- 6 Understanding
- 28 Recognizing
- 50 Guiding
- 66 Supporting
- 92 Literature
- 95 Legal Notice







#### Dear Reader,

The Karg Foundation receives a lot of questions on the subject of giftedness—FAQs (Frequently Asked Questions)—far more often indeed than it did ten years ago. And this is a good thing! Many people involved in the educational processes of children have come to realize that giftedness can also be a fundamental personality trait of children and adolescents. Early childhood education centers (Kitas), schools, and specialized guidance and counseling services should not only acknowledge gifted children, but also provide them with relevant diagnostic, guidance, and support services, recognizing their giftedness and helping them to develop their personalities and abilities. It is a fundamental human right to be supported and encouraged in accordance with one's individual talents — and supporting gifted students is a requirement of the German educational system. Gifted people may also be growing up in places where we would initially not expect them. Assuming with an open mind that cognitive abilities and talents can be found in any kind of environment not only benefits all children and adolescents but the entire educational system as well!

The Karg Foundation wants to answer the questions you may have not only as educational and psychological

professionals in educational institutions or working as educational providers, policy makers, or in training and further education institutes, but as parents and gifted people also: What is giftedness? How can it be identified? Who can provide advice for gifted children and their families? How can they be supported in the best possible way? Further information on giftedness can be found at the Karg Foundation's giftedness resource portal (Karg Fachportal Hochbegabung: www.fachportal-hochbegabung.de).

We would like to express our warmest gratitude to the authors of this publication, Prof. Dr. Franzis Preckel (University of Trier), Prof. Dr. Miriam Vock (University of Potsdam), and Dipl.-Psych. Christine Koop (Karg Foundation).

For over 30 years, the Karg Foundation has been working to improve both the communication of information and the professional qualifications of the educational and counseling systems in gifted education. Your questions are and always have been our top priority. After all, by asking your first question, you are already making a decision: for a better future for the gifted child.

I hope that reading these pages is both enjoyable and informative for you!

Dr. Ingmar Ahl

Executive Board

## Understanding

8	High aptitude and giftedness— what do these terms mean?
9	What must we be aware of in cases of extreme giftedness?
10	What is the nature of giftedness?
	What role does intelligence play?
14	What is intelligence?
16	How do abilities and talents develop into exceptional achievements?
18	Is giftedness hereditary?

20	Are there differences in giftedness between girls and boys?
	Are gifted children "different"?
24	What role does a child's family background play?
26	What preconceptions do people

#### High aptitude and giftedness—what do these terms mean?

In general, the term "aptitude" refers to a person's achievement-related development potential. If this potential is particularly high, it is referred to as giftedness. Thus, aptitude and giftedness must be clearly distinguished from achievement; they in fact represent the potential from which, under favorable conditions, exceptional achievement can develop.

Developing one's own potential is a basic human need. This is a lifelong process and depends on a variety of different factors. Apart from the actual person, these are primarily characteristics of the environment in which the person lives. What opportunities are available? Do people receive support and encouragement? And what is expected of them? Giftedness needs to be encouraged and challenged, it may only become apparent at a later stage, and may even decline at some point. The family, Kita, and school are important environments for children. They strongly influence how gifted children develop.

8

#### What must we be aware of in cases of extreme giftedness?

The most highly gifted people are individuals with extremely high ability scores, for example, people who are ranked in the top 1% of their age group in terms of ability. By definition, these exceptionally and profoundly gifted individuals are extremely rare. This extreme minority status raises several challenges because, in most cases, conventional environments are not suitable for them. Difficulties are most apparent in the preschool and elementary school years, when children are highly dependent on their immediate social environment, that is, on parents, early childhood educators, or teachers recognizing their extreme giftedness and providing encouragement and support. In many cases, this requires exceptional, age-atypical, but precisely ability-appropriate opportunities, such as the possibility to enroll in university courses in later childhood. Without support, exceptionally and profoundly gifted children may hide their abilities or become lonely and not be able to make friends. With adequate support and encouragement, extremely gifted individuals generally develop very well. Most are very successful academically, have friends, and are very satisfied with their lives.

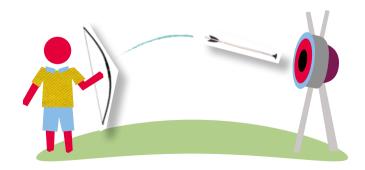
## What is the nature of giftedness?

Achievement in different areas, such as mathematics, sports, or music, are partly due to different factors. Thus, different types of giftedness can be differentiated: Whereas intellectual giftedness facilitates exceptional performance in the intellectual domain, athletic giftedness refers to a high potential for athletic achievement and musical giftedness refers to a high potential for achievement in the field of music.

Regardless of the specific type of giftedness, the fact remains that giftedness, as a person's high achievement-related developmental potential, always encompasses several components. In addition to abilities such as high intelligence in the case of intellectual giftedness, high athleticism in the case of athletic giftedness, or high musicality in the case of musical giftedness, these are primarily personality traits, which contribute to an individual's own development. This includes, for example, being open to new experiences and ideas or a high level of motivation and a desire to learn. And finally, as potential develops into achievement, the challenges change—which in turn changes the nature of what is considered to be high development potential. An example: Musically gifted children

demonstrate a particular appreciation of music, an excellent memory for melodies, and teach themselves the basic principles of playing the piano. The first piano lessons now introduce the requirement of practicing, which additionally calls for perseverance and at times the ability to tolerate frustration. And later, when auditioning for the first time, strong nerves and self-confidence are needed as well.

Giftedness is neither static nor unchangeable. Rather, a person's giftedness can be described as his or her individual profile of abilities, personality traits, and learned skills that are likely to result in positive achievement development at the present time—and therefore represent a high achievement-related development potential.



## What role does intelligence play?

Intelligence plays an important role in giftedness, especially in intellectual giftedness, but also in musical, artistic, or athletic giftedness. In general, the higher the intelligence, the better the performance-related development, because intelligence facilitates understanding, learning, and problem solving (see p. 14). Individual differences in intelligence account for achievement disparities in both education and employment guite well—explaining, for example, 25 to 50 percent of the differences in school performance among students. At the same time, however, education has been shown to have a positive impact on the intelligence development of learners. The environment also plays a role in determining how much a person can benefit from his or her intelligence. When all possibilities are available to individuals, they can make better use of their intelligence than when the external environment imposes rigid guidelines and restrictions. Finally, performance development does not depend exclusively on a person's intelligence, because in addition to abilities, personality and certain acquired skills also play a role (see p. 10).

In other words, higher intelligence is a necessary but not sufficient condition for giftedness. Thus, defining giftedness in terms of intelligence (e.g., an IQ above 130) is considered outdated in many instances. There is also no natural threshold defining the point at which a person is gifted—just as there is no such threshold defining the height at which a person is exceptionally tall. Selecting a cutoff score, such as IQ 130, can be useful, for example, to compare groups of gifted and nongifted people in scientific research. Strict adherence to an IQ cutoff score for giftedness, however, makes sense neither in everyday life nor in giftedness programs, because one would hardly expect children with an IQ of 125 to perform differently than children with an IQ of 130 when they are essentially similar in all other respects.



#### What is intelligence?

"Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings—'catching on', 'making sense' of things, or 'figuring out' what to do." (Linda Gottfredson, 1997, p. 13).

This quotation makes it clear that intelligence includes a variety of thinking skills. Typically, these occur collectively within individuals. For example, someone who easily grasps complex ideas also learns more quickly from experience. This phenomenon is referred to as general intelligence. At the same time, it is possible to distinguish among these different thinking skills in terms of which performance they influence and to what extent.

Thus, verbal intelligence primarily influences linguistic performance, numerical intelligence primarily influences mathematical performance, and figural-spatial intelligence influences drawing and design performance. A person's individual thinking abilities are not always equally strong; individual strengths and weaknesses could also become

apparent, and these can be depicted in intelligence profiles. Profiles that are unbalanced, that is, with specific individual strengths and—when viewed in comparison—weaknesses, are more likely to be found in the realm of high intelligence than in the realm of average intelligence.

"Rather, intelligence reflects a broader and deeper capability for comprehending our surroundings—'catching on', 'making sense' of things, or 'figuring out' what to do."

## How do abilities and talents develop into exceptional achievements?

The development of an individual's talents and abilities is a lengthy, sometimes lifelong, process of advancing from a specific potential to a specific achievement. Throughout this long developmental period, changes take place in the person, in his or her environment, and in the conditions that contribute to this person's positive development. Initially, giftedness or a specific development potential is demonstrated by the fact that the person is successful in many areas without any specific external guidance. They learn new content easily and quickly, often through playful discovery and without instruction. There is simply a good match between the prerequisites that the person possesses and the requirements imposed by the activity. Further development of an individual's potential now requires that he or she engage with and acquire content and skills in a specific area. Having a natural fit is no longer sufficient on its own. The person must also have the opportunity to learn and become proficient as a result. Alongside good teachers and support from the environment, this requires diligence, self-belief, and determination

to practice. To become an expert in one area while developing one's talents and abilities to achieve above-average performance in this area, it is necessary to specialize even further, to intelligently and creatively use the acquired competencies, and to form networks with others. This puts great demands on people, for example, in terms of goal setting, planning, willpower, and handling one's own resources or social skills. Finally, to deliver exceptional achievement that has a lasting impact on a domain requires individuals to maintain their commitment over time and believe in themselves, even in the face of failure and rejection. This is successful only if the person can overcome such adversity. Furthermore, it is necessary to convince others of one's own ideas. Personality and the ability to inspire others can play a decisive role here.

In other words, the stages of development of abilities and talents can be characterized as potential, competence, expertise, and exceptional achievement, each with somewhat different conditions for further positive development. Accordingly, exceptional achievements are very rare because the development of abilities and talents is complex and linked to many different preconditions.

#### Is giftedness hereditary?

Differences in the characteristics of giftedness vary from one area to another (e.g., music, art, mathematics); thus, the question of heredity cannot be answered in a universal way. Yet in many areas, superior intelligence plays an important role in giftedness. This is especially true for intellectual giftedness. It is estimated that hereditary factors contribute 50 to 60 percent of the differences in intelligence between individuals. In other words, intellectual giftedness is to some extent genetically determined. The remaining proportion, that is, between 40 to 50 percent, is attributable to environmental factors. However, these percentages are not the same at all life stages. The environment is ascribed a greater influence in children and younger adolescents, which gradually declines over the course of development. Genetic predispositions become more influential in late adolescence and early adulthood. Indeed, an increasing influence of our genes on intelligence appears to come about with age and when we seek out or create environments that are suited to us. Complex interactions between genetic makeup and the environment take place time and again over the course of a person's life: Children will behave differently depending on their genetic makeup, and the environment will

react accordingly. On the other hand, hereditary predispositions can also have different effects in different environments. If two people live in very different environments, intellectual differences between them can be explained to a greater extent by external conditions. When they live in very similar environments, differences in their intelligence may be more readily explained by their hereditary dispositions.



# Are there differences in giftedness between girls and boys?

Results of research show that, in most areas, girls and boys are more similarly gifted than they are different. Interests, however, are one exception. Whereas girls often prefer subjects that involve animate, social, or artistic activities, boys are often interested in objects and pursue practical, technical, or explorative interests. These differences are also evident in the gifted, but less pronounced than in the nongifted, because gifted girls often exhibit highly developed theoretical and research interests as well. Evidence of gender differences at the extremes of specific trait distributions has become more apparent. In terms of mathematical and scientific abilities and general intelligence, more boys than girls show extremely low or extremely high scores. For verbal skills, however, a somewhat different picture emerges: Here, very low scores are found more often for boys and very high scores for girls. Nevertheless, these gender differences in the distributions of extreme values are also environment- and culture-dependent and have steadily decreased in recent decades.

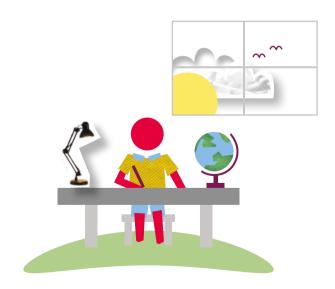
To summarize, there are greater differences within the same gender than between the genders. Yet societal gender-based expectations and educational practices of parents and teachers continue to persist, and these can significantly influence the talent development of gifted girls and boys.



#### Are gifted children "different"?

Gifted children tend to have superior abilities, and they are more receptive to new experiences and ideas, more interested in intellectually challenging leisure time activities, tend to rate their own capabilities at higher levels, and often show a greater willingness and desire to excel than children who are not gifted. But are there any other differences? According to research, gifted and nongifted children are more alike than different in areas outside of achievement-related domains. There are no differences between the two groups, for example, in the frequency of mental health problems or in their emotional well-being. Likewise, gifted people do not tend to be more conscientious or introverted, nor are they less agreeable. These children have comparable to higher social skills and just as many friends as children who are not gifted. Minor differences are found when evaluating one's own appearance and athletic abilities: In these areas, the self-evaluations of gifted people tend to be slightly lower than those of their nongifted peers. These findings all relate to comparisons of gifted and nongifted individuals as groups, that is, to an average value that does not always apply universally to each individual. However, in certain cases, special circumstances may arise (see, e.g., the discussions on

underachievement on *p. 58* and extreme giftedness on *p. 9*). Problems can arise when the child's needs are overlooked or when the environment responds to the needs inappropriately. The feeling of being "different from the others" may be present as well. However, this applies equally to both gifted and nongifted individuals.



## What role does a child's family background play?

The development of a child's abilities in early childhood is strongly related to the stimulation and support provided at home. There are considerable differences in family upbringing conditions in Germany, depending on the social and occupational status of the parents and their level of education as well as the importance of education in the family and a family's financial resources. Encouraging language skills at home also particularly depends on whether the parents are new immigrants to Germany and whether the German language is the first or second language both for them and their children. Financially disadvantaged families often lack the resources to provide the diverse stimulation and learning opportunities that support gifted development, such as musical instruments and instruction, books, travel, or attending cultural events. As the child ages, the influences from early education at the Kita and later at school exert a greater impact on development. Nevertheless, familial and social background still shape a person's development of his or her abilities and educational career. Despite many efforts in recent years to make the school system more equitable, recent studies indicate that children from less educated and financially

disadvantaged homes continue to face higher hurdles in their school careers. Children from these families are less. likely to be identified as gifted, to participate in special education programs, to attend specialized courses, and to skip grades, and they are underrepresented in student support programs that award scholarships for the gifted. They are also less likely to receive a recommendation to attend the highest form of secondary school (i.e., Gymnasium) (even with equally high academic achievement) than children from more socially advantaged families. Thus, children from less educated and financially weaker families face difficulties in developing their abilities and talents. Both the education system as well as external support organizations for gifted students have an obligation to provide even more opportunities to compensate for this disadvantage.



#### What preconceptions do people have about gifted people?

The media often portrays gifted people in stereotypical ways, for example, as a shy person who is highly intelligent but unable to cope with the demands of everyday life or as an overachiever who not only effortlessly earns excellent grades but is also involved in the community and likeable. In most cases, these clichés do not correspond to reality (see p. 22). They do, however, influence the image others have of gifted people—creating a new reality, so to speak—and challenge the gifted to confront these stereotypes. The "stigma of giftedness" approach suggests that some gifted individuals are afraid of being conspicuous to others or of being ostracized because of their giftedness. This is especially true for gifted adolescents. As a response, they may exhibit various behaviors that are ultimately harmful to them. For example, they may attempt to conform to the stereotype; or they may blend in and hide their giftedness; or in the extreme case. they may also deny and reject their giftedness and actually badmouth gifted people.

Stereotypes and prejudices can also have an effect on the behavior of others toward the gifted. If teachers assume, for example, that a gifted child is more likely to be difficult in the classroom, this will be reflected in their reactions and behaviors toward that child. In turn, like a "self-fulfilling prophecy", this can actually lead to the gifted child behaving in a difficult manner. It is therefore very important to shed light on false stereotypes and prejudices about gifted people—and not only about those held by other people, but also those held by the gifted people themselves. Apart from achievement-related characteristics, gifted individuals do not differ systematically from individuals who are not gifted. And just like their nongifted peers, gifted people are also quite diverse.



## Recognizing

- 30 What is important to keep in mind when identifying giftedness?
- What methods are used to identify giftedness?
- 34 When is intelligence testing appropriate?
- 36 What exactly is IQ?
- 39 Do all intelligence tests measure the same thing?
- 40 At what age can testing begin?

- 42 Who should perform testing and how does reliable intelligence assessment work?
- 44 Is it possible to determine giftedness based on checklists?
- 46 How are children with high abilities recognized in the Kita?
- 48 How is giftedness recognized in school?

# What is important to keep in mind when identifying giftedness?

As a person's giftedness develops, they change and so do the very things that constitute their achievementrelated potential. In addition, giftedness can develop differently over time depending on the area (e.g., early on in mathematics, later in diplomacy). This dynamic view of giftedness has consequences for identifying gifted individuals. In some areas, high potential becomes apparent at an early stage whereas in others it does not emerge until later. In other words, looking for potential is worthwhile not just on one single occasion, but rather repeatedly, that is, from time to time. Depending on the area, different characteristics also indicate a specific development potential. A specific interest in numbers or spontaneous understanding of quantity and size relationships can indicate mathematical giftedness in preschool age; musical giftedness would rather involve spontaneous music-making or a distinct memory for melodies. As a general rule, however, a guasi-natural fit between a child and a particular content or activity is indicative of high potential. Finding these and trying them out requires the provision of a variety of many opportunities and available offers. Especially with

young children, providing these opportunities is often more important than identifying potential in children according to the motto "first provide opportunities and encourage, then identify". As a child then gravitates toward a particular subject or area, learning ability becomes more important. In terms of recognition, this means paying attention not only to cognitive abilities, but also to prior knowledge, learning strategies, or the child's motivation. Is the child confident about learning? Can he or she cope well with failure? All of these factors are important for further development. At a later stage, creativity, self-regulatory skills such as the ability to set goals and plan one's own learning, and social skills emerge. Thus, for the identification of giftedness, many characteristics play a role, and their respective significance can shift in the course of giftedness development. In this view, diagnosing giftedness is thus understood as a process.



#### What methods are used to identify giftedness?

Identifying giftedness involves focusing on the whole person; specifically, it means determining the person's achievement-related developmental potential, understanding whether and how it manifests itself in behaviors and performance, and taking into account the person's developmental history and environment. There are many possible methods and approaches for this purpose:

Achievement-related development potential can be assessed most objectively, reliably, and validly using instruments for psychological assessment. Assessment tests provide information on intelligence, creativity, or specific skills such as concentration and attention. Questionnaires provide information about personality or motivational characteristics such as the need for cognition, interests, or how one perceives one's own abilities. This can be supplemented by a nomination to receive support either by the students themselves or by others, such as friends, parents, or teachers. Using screening checklists can increase awareness of specific giftedness traits.

At the same time, achievements can be documented directly, for example, in the form of student grades on report cards, performance on standardized learning assessments (e.g., VERA or KERMIT), participation in competitions, or through the intense pursuit of hobbies.

Educational diagnostic methods such as classroom observation and questioning or interviews with teachers provide important information on the learning behavior and achievement of students.

Furthermore, candid conversations, interviews, or questionnaires provide information about the development and learning and home environment of a child or adolescent, and particularly about the family, Kita, or school and the resources, support options, or conflicts experienced in these settings.

It is often useful or even necessary to combine several methods and sources of information and to use them not only once, but repeatedly at different points in time.

## When is intelligence testing appropriate?

Diagnostic testing is indicated when a specific question requires an answer in a particular situation and the test results can provide this information. For questions involving a child's intelligence, intelligence tests are the tool of choice. These tests provide more accurate and reliable results than other methods of assessing intelligence, they can provide information on aptitude strengths, and they can predict relatively accurately how further achievement will develop. Typical reasons for intelligence testing include questions relating to a child's suitability for early enrollment in school or for skipping a grade. Does the child's intellectual ability meet the criteria for successful participation in the higher grade? In many cases, various indicators will already be available by the time the guestion of providing specific support measures arises, for example, when a five-year-old child is already able to read or a school-age child is performing extremely well academically. Objective intelligence assessment by means of a standardized test is frequently recommended. At other times, the situation is less obvious, for example, when a child makes a very talented impression but still performs poorly in school. Thorough diagnostic testing is particu-

larly valuable in such cases to provide the child with appropriate support. Intelligence testing in adolescence can be used to identify the areas where a student possesses specific strengths or-by comparison-specific weaknesses. Being aware of one's intelligence profile can be helpful to adolescent gifted students when making academic career decisions as well as choosing their courses of study. Also, several support organizations may require the results of intelligence testing before deciding whether or not to accept or admit children or adolescents into their programs. Finally, the results of intelligence testing can also help extremely insecure gifted students gain clarity about their cognitive abilities. Thus, results of intelligence tests can provide very valuable information; however, even they should not be used as the sole basis for decision making, for example, on the school career trajectory, but should always be interpreted alongside other information, such as a person's development to date.

#### What exactly is IQ?

The intelligence quotient—abbreviated IQ—is a measure of how a person's intelligence can be described in relation to a group of people who are representative of that person. In the case of IQ, the average of this reference group is always set at 100; therefore, the average IQ is an IQ of 100. IQ scores are also considered to have a normal distribution. This means that most people in the reference group (68 percent) have an IQ between 85 and 115. This area is also referred to as the average range. About 95 percent of the people in the reference group have an IQ between 70 and 130. Extremely low or high IQ values are equally rare: Around two percent of people have a very low IQ (below 70) and about two percent have a very high IO (above 130).

Besides the IQ norm, other test norms such as value points or T-scores can be considered. These norms can all be converted to one another. The difference between them is in the respective average value that has been applied and in the specification of the average distribution of the values. For example, the average value for T-scores is 50 (thus corresponding to an IQ of 100), and the average range is between 40 and 60. Similarly, percentile ranks are also used. The percentile rank indicates the percentage of the comparison group that performed worse or at most

equally well on the same test. For example, being ranked in the 98th percentile means that only two percent of the comparison group performed better than the subject on the test. This value corresponds to an IQ value of 130.



"Intelligence is made up of many different abilities, and no one test captures them all."



### Do all intelligence tests measure the same thing?

Intelligence is made up of many different abilities, and no one test captures them all. Thus, there is no such thing as one single IQ test; rather, depending on the theory and the choice of tasks, there are different tests that cover more or less different aspects of intelligence. If a child has different scores on two different tests, it may be because the tests are actually measuring different things. Some tests, for instance, cover areas that are highly dependent on education, such as vocabulary or general knowledge. By using language-free material, other tests strive to be more neutral in terms of education. In other words, IQ is not the same as IQ! Therefore, whenever an intelligence test is administered, it is important to understand exactly what skills and abilities are being assessed.

Recognizing 39

## At what age can testing begin?

A number of tests can be administered from as early as two to three years of age. However, a lower age at testing means a lower stability of the intelligence test results. This is partly due to the accelerated developmental processes that occur at a young age. Higher intelligence found in a very young child may also represent a developmental advantage that same-age children catch up to later. Intelligence can be measured more reliably with tests starting at around five years of age. However, very strong individual variations are still possible as well. Thus, to address specific diagnostic questions, recent test results should be obtained for children of preschool and primary school age on a case-by-case basis. It is important to ensure that the test content and the questions to be answered by the test results are in line with each other.

"A lower age at testing means a lower stability of the intelligence test results."



# Who should perform testing and how does reliable intelligence assessment work?

Regardless of how good a test may be, the key to successful assessment lies in the appropriate use of the test and the correct interpretation of the results. Comprehensive skills in psychodiagnostics and also fundamental knowledge of theory and research findings are essential. Consequently, tests should only be administered by psychologists with a professional degree (German "Diplom" degree or Master's degree) or by professionally qualified special education instructors. These specialists should also have experience in working with children and adolescents as well as experience in testing exceptionally intelligent children.

Ideally, two intelligence tests should be administered on different days. Testing is based on the premise that the child is motivated and able to complete the test tasks to the best of his or her ability. In addition, a preliminary interview focusing on the child's development and the specific questions to be addressed in the diagnostic process should take place to allow the selection of the appropriate test procedures.

Additional data should be collected from the parents and also from the school when possible to gain a more comprehensive impression of the child.

Together with IQ scores or other norm values, feedback of results should also include "confidence intervals." After all, a degree of inaccuracy must be assumed for all test instruments—and this is also true for intelligence tests. However, this measurement inaccuracy can be clearly estimated for intelligence tests, and this is accounted for by the confidence intervals. The actual IQ of the tested child is contained, with a specific certainty of typically 95 or 99 percent, within these intervals. For example, for a measured IQ of 135, the confidence interval would range from IQ 128 to IQ 142.

For an overview of the leading intelligence test instruments and a discussion of their use in giftedness assessment, please visit the Karg Foundation's giftedness resource portal (only available in German language):



### Is it possible to determine giftedness based on checklists?

There are numerous checklists available that specify characteristics considered to be typical of gifted children and are used to identify giftedness. Yet evidence from research has shown that such checklists are of little use for this purpose. Often the characteristics that are listed are not at all typical for gifted children and are vaguely formulated so that they can apply just as well to many children who are not gifted (e.g., "is very interested"). Furthermore, it is difficult to accurately and reliably observe most of the characteristics in daily life or at school. The descriptions of the characteristics also do not specify, for example, the level of proficiency at which memory or vocabulary can be regarded as adequately exceptional. In most cases, a scoring guide is not provided. Finally, many of the characteristics on the lists are shaped by the educational and support services that are available to a child. However, giftedness as a potential should initially be viewed in a separate context.

Thus, checklists for teachers or parents cannot be used as a diagnostic tool for giftedness. They can, however, draw attention to certain characteristics and needs of a child that might otherwise be overlooked.



### How are children with high abilities recognized in the Kita?

Preschool children are at an age where they develop their first specific interests—often through exploration and playful encounters with an object or an activity. Ideally, they can find out what suits them best by taking advantage of the wide range of activities and stimuli provided by the Kita. However, to identify whether a child is particularly gifted in a specific area, it is necessary to provide activities that allow children to test themselves at different levels of difficulty, regardless of their age. Suitable activities are those that place varying demands on the children and give them the freedom to decide how they want to participate. Consequently, how the support programs in Kitas are designed already represents an important prerequisite for the recognition of specific abilities and talents.

Furthermore, identifying giftedness should be understood as a process. Young children develop very differently. A child's accelerated development in one or more areas can also be an expression of a temporary developmental advantage over peers. It is therefore important to observe and assess a child's development continuously and over a longer period of time. Methods that focus on children's activities and learning and which are utilized routinely are

particularly appropriate. Together with colleagues and parents, these observations of a child can then be reviewed on an ongoing basis.

First indications of potential giftedness can be a strong sense of curiosity and a high learning ability at the same time. Young gifted children are often identified by their intense and persistent interest in knowledge, remarkable ability to grasp things very quickly, extraordinary capacity to retain information, and rapid development of competencies. They also often demonstrate a high level of determination and perseverance in their efforts to acquire knowledge or new skills. Developmentally, targeted interests are still rare at preschool age, but an early, intense interest may indicate a high domain-specific ability for this very reason.

The question "How can gifted children be identified in the Kita?" is explored in more detail in the Karg Foundation's special edition, "Frequently Asked Questions (FAQs) about giftedness in early childhood".



https://www.fachportal-hochbegabung.de/faqs-early-childhood/

#### How is giftedness recognized in school?

In school, giftedness may be reflected in a student's high learning ability and motivation, in the fact that he or she is insufficiently challenged by the typical content and pace (see p. 64), and often but not always (see p. 58), in higher-than-average school performance. For children and adolescents to discover their own specific abilities, they need opportunities to demonstrate to themselves and others what they are good at and what they are capable of. Schools provide a suitable setting for this, as they offer a wide range of subjects and activities which can also help to compensate for differences in students' backgrounds. However, their potential may not always lie in those areas that are encouraged and paid attention to at school. It is therefore important to create opportunities at school for discovering, testing, and displaying such potential. This can be facilitated by offering children and adolescents spaces where they are not graded as well as tasks or activities that allow students to use different approaches and methods when working on them, which also provide challenges for the more interested and competent students. These kinds of settings should be provided on a regular basis because different abilities display different

developmental timeframes, and both students and teachers first need to become familiar with these types of openended task formats and approaches to teaching and learning. In addition, abilities and talents often develop through encouragement, and sometimes giftedness only becomes apparent after a period of investment and support.

This is why, for the recognition of specific potential in school, it is particularly important to always think of identification and support together: Based on the assessment of a student's preferences and abilities, further steps in learning and practice are specified and, after some time, the status of the student is reviewed and support is then adapted accordingly. It is important that teachers try to approach this process with an "open mind" and avoid making hasty judgments about which students are gifted in their classroom. To detach oneself from such impressions is not easy, but it is always a rewarding experience to anticipate outstanding potentials in each class and to allow oneself time and to be surprised every now and then. In addition, sharing information with colleagues about a student is particularly constructive, as giftedness may only be evident in isolated school subjects.

## Guiding

What are the concerns that
commonly motivate parents to
seek guidance?

- 54 Who offers counseling?
- 56 What are some possible challenges of being labeled "gifted"?
- 58 Underachievement: What does this mean?

- 60 What causes underachievement?
- 62 How does counseling help with underachievement?
- 64 What can parents do when their child is insufficiently challenged academically?

# What are the concerns that commonly motivate parents to seek guidance?

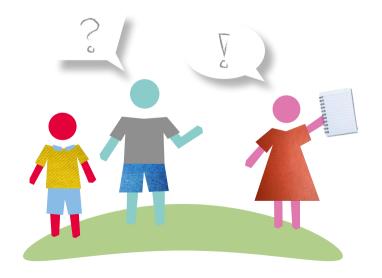
While giftedness is not necessarily associated with specific problems, people do seek out counseling services that specialize in this topic, and they do so for a wide variety of reasons. Most frequently, it is parents who are seeking advice, but also the children and adolescents themselves and the teaching professionals at schools and Kitas make use of counseling services.

Counseling does not always have to address specific problems, it can also be used to prevent them. Parents and educators are often looking for sound information on the topic of giftedness as well as on the possibilities of school and extracurricular support.

However, very many requests for consultations are also motivated by a specific diagnostic concern. In many cases, whether or not a child is actually gifted is not the only question that is raised. Rather, there are specific problems or decisions to be made that prompt a desire for educational assessment, such as issues of academic underachievement or overachievement, or making school career adjustments by skipping a grade or changing schools.

The guidance accompanying the diagnostic process then aims to provide information and assistance based on the specific individual circumstances.

Sometimes children, adolescents, or their parents are also troubled by more serious concerns. These include, for example, conflicts in the family, with teachers, or with fellow classmates, prolonged learning and achievement problems, or adverse emotional states. Counseling provides support in coping with these specific problems.



#### Who offers counseling?

There is a wide range of counseling services specifically aimed at the exceptionally gifted and their environment. Generally, counseling is provided by qualified and specialized psychologists, for example, in school psychology or educational counseling centers, private practices, or in professional gifted counseling centers and private associations (e.g., the German Society for the Gifted Child). Educators who have received further training are also increasingly taking on counseling responsibilities, especially in providing guidance and instruction to professionals and educational institutions when implementing measures to support gifted students.

Determining which counseling center is most appropriate depends on the specific questions at hand. School psychology counseling centers, for example, are tasked with supporting students in their learning development and in the successful completion of their school careers; and they often have more direct contact with the school than other institutions. In contrast, parenting resource centers (Erziehungsberatungsstellen) focus on providing counseling to parents on parenting issues and family relationship problems. Specialized, professional gifted psychology counseling centers, on the other hand, often have greater experience in assessment and individual case

counseling on the topic of giftedness. In some cases, however, families have to travel considerable distances to use these services, thus making them less suitable for counseling involving several consecutive appointments. The more clearly the individuals seeking advice can formulate their concerns, the more likely they are to determine, together with the counselor, if the counseling services offered are suitable for their needs or to identify who might be able to provide better assistance.

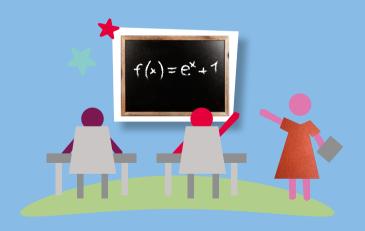
Please visit the Karg Foundation's giftedness resource portal to access a searchable directory of gifted and talented counseling services in Germany (only available in German language):



# What are some possible challenges of being labeled "gifted"?

Stereotypes about gifted people exist, and some of them are false, either portraying gifted people unfavorably or suggesting that they succeed at just about everything effortlessly. Besides, not all giftedness is the same and can differ from person to person or from area of giftedness to area of giftedness. This gives rise to a number of tasks for counseling. First, talking about what everyone involved in the counseling process associates with the term giftedness is often valuable: How is giftedness understood? What does it really mean when someone is labeled as gifted—not only for the persons themselves, but also for others? Second, in each case it is important to specify exactly what a person's giftedness consists of: What are his/her special abilities? Are these also reflected in their self-perception of their own abilities? This "translation work" contributes to avoiding possible unfavorable effects of the label "gifted" and it helps gifted people to have a better understanding of themselves.

"Not all giftedness is the same and can differ from person to person."



Guiding

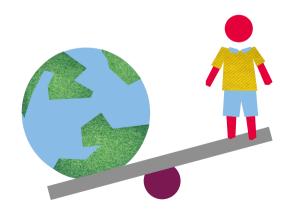
#### Underachievement: What does this mean?

Students who show only moderate or poor school performance over a long period of time despite having a very high achievement potential and above-average intelligence are referred to as gifted underachievers. This is sometimes referred to as underperformance contrary to expectations. Some children demonstrate evidence of underachievement in their classroom behavior, and the observant teacher might notice a discrepancy between a child's quick grasp of new material and inconsistent performance. Yet this is not always the case—often underachievement is hard to detect without the assistance of psychological assessment, and a child's performance is misinterpreted as an expression of his or her low abilities.

Underachievement comes in different forms. If the discrepancy between potential and school achievement is present in only one area of ability, for example, in the language arts, despite strong linguistic aptitude, this is referred to as subject-specific underachievement. Sometimes, however, contrary to expectations, a student's overall academic achievement is low. This can lead to serious consequences, such as repeating the same grade, changing schools, or even refusing to go to school altogether.

Underachievement often involves more than just academic performance: Particularly in severe cases, this can be accompanied by difficulties experienced by the student in terms of social functioning or well-being and motivation, as well as conflicts within the family and at school. Underachievement may be perceived as a heavy burden in these cases.

Although underachievement can first appear in elementary school, it is often not apparent until secondary school. Overall, boys are more likely to be underachievers than girls.



#### What causes underachievement?

Students who are gifted do not per se have a higher risk of experiencing motivational and achievement difficulties in school. A prolonged lack of academic challenge can contribute to the development of underachievement, but it is usually not the sole cause. Rather, underachievement can develop as the result of an interaction of many different factors. In the sense of a downward spiral, individual characteristics of the student as well as familial and school factors can converge in an unfavorable constellation and mutually reinforce each other in their negative effect on academic performance.

The reasons behind underachievement or the bundle of contributing factors can vary greatly from person to person. In many cases, it is not possible to clearly separate which difficulties have caused or resulted from a student's underachievement. For example, is academic failure due to deficits in learning and study techniques, or is it the result of avoiding exertion and an inaccurate estimation of one's own abilities? Do chronic family conflicts about school-related issues reflect a reaction to the academic achievement issues, or have they fueled them in the first place? These reasons are why the involvement of profes-

sional psychological counseling is recommended in most cases. First, a diagnostic approach can be used to clarify whether the discrepancy between intellectual potential and school-related skills and knowledge actually meets the criteria for underachievement. In addition, with the aim of deriving appropriate measures to help the child, the problematic conditions can be explored and identified together with the child, the family, and the school.



#### How does counseling help with underachievement?

Considering that underachievement results from an interaction of several unfavorable factors and that difficulties can vary greatly from case to case, professional psychological counseling is recommended. In severe cases, collaboration between different types of support services may be necessary. At the very minimum, however, counseling intervention is usually required, involving not only the child in question, but also the child's family and the school.

In many cases, underachievement is accompanied by severe emotional distress for children or adolescents, with impairments in their psychological well-being, self-image, and family interaction. Thus, it may be necessary to consult a professional counselor with psychotherapeutic qualifications. Both personal and family-related aspects of underachievement can then be addressed and positively influenced during counseling.

Involving the school is also important. Particularly in cases of prolonged underachievement, the performance problems may not only be due to motivational issues, but may also be due to genuine substantial deficits in the subject matter. (Re)establishing a good fit between the

individual's achievement potential and school support is therefore an important cornerstone and requires the intensive, long-term coordination of counseling and educational interventions at school. Support for schools in this process can be provided by the school psychology counseling services or specialized professional counseling centers.

Both personal and family-related aspects of underachievement can be addressed and positively influenced during counseling.

# What can parents do when their child is insufficiently challenged academically?

What can parents do when their child is insufficiently challenged academically?

When learning opportunities at school are continuously incompatible with a child's individual learning requirements, this can have a negative impact not only on motivation to learn and academic performance, but also on the child's psychological well-being and personality development. Symptoms indicating underachievement at school are thus diverse and generally unspecific. Disruptive behavior may be present as well as psychosomatic complaints or listlessness.

Signs of chronic understimulation warrant immediate attention. The first important step is to clarify whether the observed symptoms are actually due to insufficient challenges or whether there are other causes. In addition, the course of action depends on whether the issue of underachievement is limited to individual school subjects or affects the entire scholastic learning situation.

Parents should first contact the school, because restoring the fit between instructional design and individual learning needs is the most important component in

ending underachievement. By involving the child and his or her teacher, the aim is to determine the best ways to support the child's learning at his or her level of ability and to provide individualized support.

In some cases, it is helpful to contact a counseling (e.g., school psychology) center. This is particularly advisable in cases where the child is experiencing significant distress and his or her underachievement is not limited to isolated school subjects. Analyzing the current situation and prior history can then help to mutually develop the appropriate interventions. Moreover, the child, parents and, if necessary, the school can be supported in implementing the agreed-upon actions. The counseling center can support the child in learning self-regulated learning techniques, for example, or it can accompany the decision-making process when contemplating whether to skip a grade level or change schools. Schools can also turn to specialized counseling centers for help.



## Supporting

58 70	What types of support are possible?	82	When is it advisable to skip a grade level?
70	What types of support are possible?	84	What must be taken into
	How can support be provided within the family?	04	consideration when skipping a grade?
74	How can support be provided at the Kita?	86	Schools specializing in gifted education are an appropriate option for which gifted students?
76	When is early school enrollment		
	appropriate?	88	An "Early Study" program: What is it and how does it work?
78	How can gifted students be		
	supported in the classroom?	90	What options are available for providing support to gifted children
80	What types of support can schools develop to supplement classroom		and adolescents outside of school?

#### What does support actually mean?

Providing support means both challenging and appropriately guiding a child as he or she develops his or her skills and interests. Therefore, providing effective support is always personalized and will look different for different children—the decisive factor is that it fits the individual needs and possibilities of the specific child.

The promotion of giftedness is a long-term process that can extend throughout the child's development and into adulthood; it must be continually adapted to the stage of development and to new needs, environmental conditions, and evolving abilities. Ideally, this results in a continuous support system of appropriate activities and incentives.

Supporting gifted children should not be limited to specific skills in which they show special talents (e.g., mathematics or music), but rather should focus on the developmental needs of the whole person. What does the child need to effectively develop his or her talents? This may include, for example, the ability to motivate oneself and to persevere during difficult times, the ability to regulate one's own emotions, and the ability to find likeminded people and make friends. A helpful approach is

for teachers and parents to be attentive, challenging conversational partners who show authentic interest in the child, take the child's perspectives seriously as well as expand them in a sensitive manner to foster the child's enjoyment of intellectual challenges.

In other words, the best support is that which is tailored to the individual's talents, abilities, and learning needs, is flexibly adjusted over time, and is designed to be both long-term and comprehensive.



## What types of support are possible?

Support can be provided in different ways and in different places. Children can receive support in the family and at the Kita, and later at school. In terms of school support, a distinction can be made between gifted children who are in the same class as other students who are not gifted (internal differentiation) and those who are in the same class as other gifted students on a permanent or part-time (e.g., on a daily or hourly) basis (external differentiation). There are also many other possible sources of support, such as clubs, institutions of higher learning, and summer academies. In addition, there are many organizations that offer students the opportunity to participate in competitions, either individually or in groups.

Several principles of support can be distinguished, and these can be implemented in one form or another at each place that offers support to children and adolescents.

(1) Individualization or internal differentiation: During group learning with others in the school or Kita settings, activities and challenges are adapted to the individual children to facilitate good and effective learning. Internal differentiation allows children within a class or learning group to choose tasks or learning paths that are individually

adapted in terms of difficulty. Gifted children, for example, are able to work on a more challenging topic with less assistance, and they require less repetition and practice to complete it. Even in special classes or schools for the gifted, all children differ in their learning needs and therefore also benefit from receiving individual attention.

- (2) Acceleration (accelerated learning): Gifted children can begin working on specific topics earlier than their peers or they can complete the material in a shorter period of time, thus gaining time to work on advanced tasks or projects. In extreme cases, they may even skip a grade in school.
- (3) Enrichment (enriched learning): The learning content is enriched by a broader or deeper involvement with the subject matter. This can either take place in a classroom with internal differentiation or outside the classroom, for example, in family activities, after-school clubs, or extracurricular settings.

For many gifted children, it is advisable to provide support based on a combination of these principles.

## How can support be provided within the family?

Especially for younger children (but not only), the family is an important place of support. For younger children who are at the early stages of gifted development, it is important to create a variety of learning and experiential opportunities in many different areas. This provides children the opportunity to discover what interests them and what they are particularly good at. Parents can support them in recognizing their particular strengths. Observing the child is an important source of information for providing new stimuli and for supporting his or her development of interests. Parents can respond to the child's individual interests and encourage the child to find answers to his or her own questions, for example, by reading books or newspapers, using the internet, or visiting museums. The child thus learns to access information on his or her own—an important competence for future self-regulated learning.

Children also learn through the observations they make of their parents and other adults. For example, the observable interests and activities that are present and cultivated in the family, such as reading, engaging in discussions, playing sports, painting, or musical activities, also play a role in the development of interests.

As the child ages, parents become increasingly practical supporters of giftedness development by providing resources and assistance and by giving the child the space that is needed to develop both potential and interests. Parents play a constant role in providing emotional support, reinforcement, and encouragement to their child. Children who have high expectations of themselves and a high achievement potential particularly need emotional support from their families and parents who delight in their successes but do not apply pressure on them to excel.



### How can support be provided at the Kita?

Early life experiences and learning are especially important. Children never learn as easily and quickly as they do in the early years. This insight has also led to a steady increase in the importance of the Kita as an educational institution in recent years.

In many cases, gifted children develop particularly intense learning demands at an early age, some of which they assert persistently while still in the Kita setting. Thus, Kitas are important places of support for gifted children, where they can experience a variety of learning opportunities that provide an important basis for the further development of their individual abilities and talents. Compared to schools, an advantage of Kitas is that they are very flexible when it comes to the composition of (small) groups and in choosing and structuring topics for children. Based on their experience and their knowledge of many different children, Kita educators can often easily recognize when children exhibit interests and abilities that are unusual for their age—and they can offer these children targeted stimulation and support. Providing group spaces with ample resources, including materials that may not be considered "age appropriate" (e.g., books for beginning readers, microscopes for children, more challenging board games) can support gifted development. Because of the mixture of ages in Kita groups, the younger children can be particularly supported by including them early on in activities for older children, for example, in activities and programs intended for preschool children.

An in-depth look at the topic of "support in the Kita" is provided in the Karg Foundation's special edition "Frequently Asked Questions (FAQs) about giftedness in early childhood".



https://www.fachportal-hochbegabung.de/faqs-early-childhood/



#### When is early school enrollment appropriate?

The question of early school enrollment also arises when a child tackles school entry learning content at an early age. Spending another year in the Kita can be excruciatingly boring for some children and can stifle their enthusiasm for learning. Yet not all children who are deeply interested in school subjects at an early age have to start school earlier. For early enrollment, the child's social situation must also be taken into account: Can the child be enrolled in school at the same time as his or her friends? Is the child ready to cope with the social and behavioral demands of school? And last but not least: Does the child want to start school early? Professional educators and psychologists provide support during the information-seeking and decision-making processes. When early school enrollment is planned, it is recommended to integrate the child into the group of preschool children at the Kita as soon as possible. Research has indicated that early enrollment generally works well when it is well-prepared and the child demonstrates adequate intellectual ability.

It is often the children rather than the parents who are pushing to be allowed to start school early.



### How can gifted students be supported in the classroom?

A classroom in which teaching follows the "one pace fits all" approach, with the whole class expected to work on the same assignments at the same speed, is fortunately in many schools now a thing of the past. In contemporary classroom instruction, growing emphasis has been placed on the learning levels of individual children and youth and on providing the amount of support, practice, and challenge needed by each individual student to learn effectively. What this means for gifted students is that they often start class with a higher level of prior knowledge, are able to acquire new knowledge at a much faster rate, and require less practice and repetition. The time that is gained can be well used for further learning or working on (self-chosen) projects. It goes without saying that gifted students also need assistance and guided practice—though usually on a different level and at a different pace than other children. A challenge in this kind of differentiated teaching is to avoid singling out or isolating students and to consistently provide opportunities for joint learning and interaction in the classroom. One promising approach involves the whole class working on the same subject matter at varying levels of proficiency and exploring in

depth the different facets of the material. Social learning opportunities can also be provided through cooperative learning in small groups, where gifted children can work on more advanced topics with equally gifted peers who are faster learners. The attitude of the teachers is also fundamental for providing effective support of gifted students in the classroom. If they are able to recognize that the learning needs of a gifted child in the class are legitimate and are willing to find appropriate assignments and projects for that child, then the odds are high that these support efforts will yield successful results. In contrast, the idea of using gifted and fast-learning students in the classroom as "assistant teachers," that is, allowing them to exclusively help other children in the time they have gained, has not proven to be an effective solution.



# What types of support can schools develop to supplement classroom instruction?

Schools can create many other opportunities for gifted students in addition to offering support in a differentiated classroom setting. Possibilities range from relatively simple individual programs, such as afternoon study groups, to more complex approaches that involve the school as a whole.

Even selected individual opportunities can be very helpful and important—these include, for example, offering special all-day courses, encouraging students to take part in competitions and helping them prepare for them, or offering them the opportunity to take additional elective courses in lower and upper secondary school. Although somewhat more elaborate to organize, more complex models have a greater impact. Positive experiences have been reported, for example, with "pull-out programs" at elementary schools, where gifted and high-achieving children leave their regular classes one day a week and are supervised together by a teacher while working on advanced projects. In addition, the "revolving door model" originating from the USA has proven successful, allowing students to utilize the school's various learning opportu-

nities with great flexibility by temporarily leaving their learning group and participating in certain instructional units in other courses, higher grades, or—as in the case of pull-out—in a group specifically created to work on projects. For older students, the school can provide support in organizing a school year abroad or in beginning an early university study program.



## When is it advisable to skip a grade level?

If a student is chronically and significantly insufficiently challenged in most subjects, steps must be taken to ensure that he or she does not develop motivational and learning problems and remains eager to attend school. Initially, efforts should be made to improve the situation for the child or adolescent through individual differentiation, for example, by assigning more challenging tasks or by eliminating redundant exercises that are repetitive in nature. When a student's underachievement is particularly or exclusively evident in one subject, arrangements can be made for the student to attend classes in that subject at a higher grade level (revolving door model). In many cases, these actions already lead to considerable improvement. Sometimes, however, they are not enough and the question of whether the current grade level is indeed the most appropriate place for the student should be considered. It is possible that the requirements of the next grade level would better align with the child's or adolescent's learning opportunities and learning needs. In that case, academic acceleration (i.e., skipping to a higher grade level) may be an option to consider. Legally, this is possible in all German federal states (i.e., Bundesländer). Generally, prior to making the decision to skip a grade, students are assessed to determine whether their intellectual aptitude is well above average and their academic performance in all core subjects is satisfactory or better. If these conditions are met, it is very likely that the student's academic acceleration will be successful and that he or she will be more motivated to learn in the higher grade level and feel more content at school. For highly gifted and fast-learning students, however, it is important to realize that skipping a grade may not suffice as a support measure, because they may quickly catch up and, due to their fast learning pace, they may soon be underchallenged again. Thus, in some cases, skipping a grade is a necessary but by no means sufficient intervention.



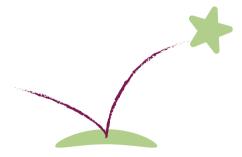
# What must be taken into consideration when skipping a grade?

Skipping a grade level is a well-researched and generally recommended intervention if the necessary requirements are met by the child and the child's environment. However, skipping a grade is a relatively strong intervention in a student's school career and thus also involves risks in individual cases. Careful preparation and educational guidance must always be provided when students are skipping grades. In addition to the child's aptitude and academic achievement, his or her social situation and social skills should also be taken into account when assessing the prerequisites for grade acceleration, for example: Does the child have friends in class, does he or she socialize easily? The situation in the prospective new class must also be taken into account. The entire process should be jointly coordinated with the teachers of the class the child is leaving and the new class as well as with the parents and the child in question: under no circumstances should skipping a grade be "carried out" until all the people involved are completely in agreement.

Initially, it is advisable to arrange an introductory phase during which the child can take part in the lessons

of the higher class on a trial basis. It is important to explain to the other students in both classes what is happening, why the child is changing classes, and that this is a perfectly normal situation. This trial phase can be communicated to younger children in particular as an "internship" in such a way that a return to the former grade will be easily possible if necessary. After children have skipped a grade, it is important to continue providing specific supervision over a period of time to ensure that they become acclimated and integrated as well as catch up on any learning material deficits.

Careful preparation and educational guidance must be provided when students are skipping grades.



# Schools specializing in gifted education are an appropriate option for which gifted students?

Schools specializing in the education of gifted students as well as gifted programs at regular schools offer the most comprehensive educational support: The instruction provided in these settings is typically both substantially accelerated and augmented by more in-depth and broader involvement with school-related topics. As a result, these schools can respond optimally to the learning needs of gifted students. They often also offer a range of elective and after-school programs that provide additional support opportunities. Whereas some specialized schools or classes have specific profiles (e.g., music, science), others target students with broad intellectual abilities.

Prior to admission, students typically undergo an extensive selection process, which may include achievement and intelligence testing, so that ultimately only truly gifted and (potentially) high-achieving children and adolescents are admitted. It is reasonable to assume that learning together with other gifted students also has a positive effect on learning success.

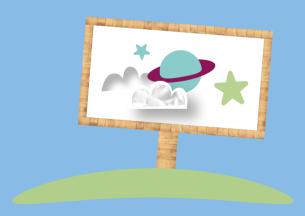
Research has shown that these schools are generally successful because their students achieve very good learning outcomes and are usually very satisfied with their schools. Likewise, the teachers typically enjoy teaching in specialized schools and classes. However, specialized schools may not always be an option. Many gifted children and adolescents are very happy and do well at their regular school, so there is no need for them to attend a specialized school. Furthermore, there are relatively few specialized schools in Germany that are only available in certain locations, and not everyone can travel long distances to attend school or wants to transfer to a boarding school in order to attend a specialized school.



# An "Early Study" program: What is it and how does it work?

Students in upper secondary school can enroll in free-of-charge early study programs offered by many universities. For this purpose, standard courses and seminars are opened to include these young students, and a separate office is responsible for advising, admitting, and accompanying the concurrently enrolled secondary school/university students. They are usually also assigned tutors (specially trained students) to assist them. For their studies, the students may be excused from school for certain classes, and they are required to make up the subjects they missed at school independently. Therefore, early study is generally recommended only for rather high-achieving and well-organized young people. Successful completion of university examinations can be credited toward students' regular degree programs at a later date. However, taking exams is not compulsory, and many students choose not to take them and instead use their time (e.g., one or two semesters) at the university as an intellectual stimulus and an opportunity to explore what it is like to attend university. The support provided by the school is sometimes less than ideal, which is why the students participating in early studies need to be independent and communicate well with their teachers.

"Early studies are generally recommended only for high-achieving and well-organized young people."



Supporting

# What options are available for providing support to gifted children and adolescents outside of school?

Gifted students also find a variety of opportunities outside of school to pursue their interests, meet likeminded people, and develop their potentials. Yet the range of available options varies considerably from region to region. Several public and private institutions offer afternoon courses on a wide range of topics. In addition, in many cities, there are course programs offered for gifted children that are organized by local parents' associations. In addition, student and summer academies (e.g., the Deutsche SchülerAkademie [German Student Academy] for upper secondary school students) target gifted, enthusiastic, and interested young people who enjoy participating in projects or working intensively on a subject or topic. Participation in one of the many federal or state student competitions also offers an attractive option. Most universities also offer courses for interested and talented pupils, for example, in the form of university lectures for children (Kinderuni) or by providing the opportunity for enrollment in an early study program. Other educational institutions, such as adult education centers or museums, can also offer exciting programs for gifted children and teenagers. For older, particularly gifted students, a school year abroad can be a challenging and intensely empowering time to learn a new language and gain new experiences.



#### Literature

**Arnold, D.; Großgasteiger, I. (2014).** Ressourcenorientierte Hochbegabtenberatung [Resource-oriented giftedness counseling]. Weinheim/Basel: Beltz

**Arnold, D.; Preckel, F. (2019).** Hochbegabte Kinder klug begleiten: Ein Handbuch für Eltern (4. Auflage) [Providing practical guidance to gifted children. A handbook for parents (4th ed.)]. Weinheim/Basel: Beltz

**Gottfredson, L. S. (1997).** Mainstream science on intelligence: An editorial with 52 signatories, history, and bibliography. Intelligence, 24(1), 13-23. Retrieved from https://www1.udel.edu/educ/gottfredson/reprints/1997mainstream.pdf

Jacob, A. (2016). Hochbegabte Kinder in der Beratung. Diagnostik und Hilfen für Familien [Counseling gifted children. Assessment and assistance for families]. Weinheim/Basel: Beltz

Koop, C.; Schenker, I.; Müller, G.; Welzien, S. & Karg-Stiftung (Hrsg.) (2010). Begabung wagen. Ein Handbuch für den Umgang mit Hochbegabung in Kindertagesstätten [Dare to be gifted. A handbook for dealing with giftedness

in early childhood education centers]. Weimar, Berlin: verlag das netz

**Koop, C.; Seddig, N. (2021).** Hochbegabung bei Kindern erkennen und begleiten [Recognizing and supporting giftedness in children.]. Kindergarten heute – wissen kompakt. Freiburg: Herder

Müller-Oppliger, V.; Weigand, G. (Hrsg.) (2021). Handbuch Begabung [Guide to giftedness]. Weinheim/Basel: Beltz

**Preckel, F.; Vock, M. (2020).** Hochbegabung. Ein Lehrbuch zu Grundlagen, Diagnostik und Fördermöglichkeiten (2. Auflage) [Giftedness. A textbook of principles, assessment, and support (2nd ed.)]. Göttingen: Hogrefe

**Rohrmann, S.; Rohrmann, T. (2017).** Begabte Kinder in der KiTa [Gifted children in the KiTa]. Stuttgart: Kohlhammer

Rohrmann, S.; Rohrmann, T. (2010). Hochbegabte Kinder und Jugendliche. Diagnostik – Förderung – Beratung (2. Auflage) [Giftedness in children and adolescents. Assessment – support – counseling (2nd ed.)]. München/Basel: Ernst Reinhardt Verlag

Steenbuck, O.; Quitmann, H.; Esser, P. (2011). Inklusive Begabtenförderung in der Grundschule. Konzepte und Praxisbeispiele zur Schulentwicklung [Inclusive gifted education in elementary schools. Concepts and practical examples for school development]. Weinheim/Basel: Beltz

**Steinheider, P. (2014).** Was Schulen für ihre guten Schülerinnen und Schüler tun können. Hochbegabtenförderung als Schulentwicklungsaufgabe [What schools can do for their bright students. Promoting giftedness as a school development task]. Wiesbaden: Springer

**Webb, J. T. (2017).** Hochbegabte Kinder. Das große Handbuch für Eltern. 2., unveränderte Auflage [Gifted children. A comprehensive handbook for parents, 2nd ed.]. Göttingen: Hogrefe

Winebrenner, S. & Brulles, D. (2018). Teaching gifted kids in today's classroom. Strategies and techniques every teacher can use (Updated fourth edition). Minneapolis, MN: free spirit publishing.

#### **Legal Notice**

#### Publisher

Karg-Stiftung, Lyoner Straße 15, 60528 Frankfurt am Main T +49 69.874027-0 | F +49 69.874027-50 www.fachportal-hochbegabung.de | www.karg-stiftung.de

#### Liability

Dr. Ingmar Ahl, Board of Directors (Executive Board)

#### Authors

Prof. Dr. Franzis Preckel (University of Trier)
Prof. Dr. Miriam Vock (University of Potsdam)
Dipl. Psych. Christine Koop (Karg Foundation, Head of Counseling Division)

#### Translation

Lisa Trierweiler, Gusterath

#### Editor

Daniel Shatwell, Hanau

#### **Project Management**

Reingard Lipp, Head of Professional Media Division Anja Gjaldbaek, Project Lead Professional Media Division

#### **Design & Production**

Novamondo, Berlin

#### Version

1st edition, October 2022

The text and graphics appearing in this brochure are protected by copyright. Any other use of this publication beyond this copyright, in particular its duplication, revision, translation, distribution, and publication, requires the written consent of the publisher. This content may not be used for the development, training, and/or enrichment of Al systems, especially generative Al systems. Text and data mining is prohibited. Use of the content for text and data mining and Al training of any kind is expressly reserved and therefore prohibited.



#### Karg special Editions II

Contributions to gifted education and gifted research

Karg-Stiftung www.karg-stiftung.de www.fachportal-hochbegabung.de ISSN 2191-9992

