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Career Tools

AchieveWorks® Intelligences

Counsellor Handbook

A counsellor/adviser's guide for
using *AchieveWorks Intelligences* to
understand, counsel and advise students

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Introduction

This handbook has been written specifically for *you* – the counselor or advisor who uses ***AchieveWorks Intelligences*** with students**.** It is our hope that this resource will help both you and your pupils get the maximum benefit from this program.

In preparation for using *AchieveWorks Intelligences* with students, we suggest you begin by first reading this handbook in its entirety and then taking the assessment yourself. This will help you to understand the theory behind the program and provide you with experience and practical advice, ensuring the best possible results when administering *AchieveWorks Intelligences* to your students.

We hope you enjoy *AchieveWorks Intelligences* and that you find this handbook informative and a helpful resource in using the program with your students. If you have feedback, questions or concerns, please don't hesitate to contact us.

Background

AchieveWorks Intelligences is founded on the theory of multiple intelligences (MI). First proposed in 1983 by Howard Gardner, professor of cognition and education at the Harvard Graduate School of Education, the theory dispenses with the traditional notion of human intelligence as a single general ability: this is the concept of intelligence with which most of us are familiar and which typically is measured by IQ tests. Rather, Gardner argued that individuals employ many different faculties – something he termed "multiple intelligences" – when solving problems.

Gardner also concluded that all individuals have all of the intelligences, to varying degrees. So, while the comparative strength or weakness of each intelligence varies from person to person, this means that all of us have at least some of each intelligence within. And everyone has the ability to further improve all of their intelligences. This is the premise upon which *AchieveWorks Intelligences* has been developed. The program helps individuals recognize their strengths and weaknesses and develop all of their intelligences to their greatest potential.

Whether directing a student through the program or using it yourself, there are four key points to keep in mind regarding multiple intelligences theory and the application of *AchieveWorks Intelligences*:

1. Every individual possesses all of the intelligences to some degree.
2. Highly developed intelligences can be used in many ways to optimize success.
3. It is always possible to further develop intelligences – both strengths and challenge areas.
4. Intelligence profiles can change as intelligences develop.

Reading Level

The readability of the *AchieveWorks Intelligences* assessment questions and report content has been measured with the ReadablePro analysis tool, available online at readable.com. The tool provides scores for the following five recognized tools, each of which uses a unique formula to determine the readability of a piece of text:

- The Flesch-Kincaid Grade Level, which rates one's comprehension of the text on a U.S. school grade level
- The Gunning Fog Index, which estimates the years of formal education one requires to understand the text upon first reading it
- The Coleman-Liau Index, which provides an approximation of the U.S. grade level one requires to comprehend the text
- The SMOG Index, which estimates the years of education one requires to understand the text
- The Automated Readability Index, which produces an approximation of the U.S. grade level one needs to comprehend the text

Additionally, ReadablePro provides the "Readability Rating", a bespoke rating system that factors in all of the scores from the other algorithms to create an overall score, displayed as a letter grade.

Item Measured	Readability Rating	Flesch-Kincaid Grade Level	Gunning Fog Score
Assessment	A	6.7	9.3
Individual report	A	7.8	9.2

Item Measured	Coleman-Liau Index	SMOG Index	Automated Readability Index
Assessment	8.0	10.2	5.8
Individual report	11.5	10.1	7.3

Overview of Intelligences

> "An intelligence is the ability to solve problems, or to create products, that are valued within one or more cultural settings."

When Gardner first introduced his theory, he identified seven intelligences:

He later added **Naturalist** intelligence and proposed the possibility of a ninth, **Existential** intelligence, which remains provisional pending further research to support it.

To establish whether a particular ability qualifies as an intelligence, Gardner developed a set of eight criteria to consider. In order to be defined as an intelligence, an ability must meet a majority of these criteria:

1. **The potential for isolation by brain damage:** the intelligence should be linked to a specific part of the brain, and damage to that region of the brain impairs the ability of that intelligence.
2. **Its place in evolutionary history**: the intelligence should have served a role in the ability of humanity to survive.

3. **The presence of core operations:** the intelligence should have an identifiable set of information-processing actions for dealing with specific types of input – such as the ability to translate sounds into words, for instance.
4. **Susceptibility to encoding into a system of symbols:** the intelligence should employ its own "language" or symbol system with which to convey information.
5. **A distinct developmental progression:** the intelligence should develop at its own unique rate and exhibit various levels of expertise, from novice to expert.
6. **The existence of savants, prodigies and other exceptional people:** the fact that some individuals demonstrate an extraordinary ability, or an extraordinary lack thereof, suggests that the ability in question is a discrete form of intelligence.
7. **Support from experimental psychological tasks:** it should be possible to identify the intelligence through the use of experimental psychological tasks and conclusions.
8. **Support from psychometric findings:** it should be possible to examine the presence, and relative strength or weakness, of an intelligence using psychometric testing.

The criteria permit the following assumptions to be made about multiple intelligences:

- Intelligences can be measured and exist over a range of levels.
- Each intelligence can be viewed individually in its potential, application and development.
- Intelligences are traits that are both:
    - innate qualities that can differ between individuals, and
    - significantly affected by experience and environment.

While the theory allows us to examine each intelligence separately, in the real world they are most commonly used in combination with other intelligences. Just as specific muscles of the body can be isolated but typically work together in groups, so the vast majority of applications and development of intelligences occur when several intelligences are in use at the same time. Your student's personalized *AchieveWorks Intelligences* report provides a comprehensive analysis of each of their intelligences, describing how the individual intelligence is demonstrated in their behavior and activities and discussing strategies for developing it further, on its own as well as in concert with other intelligences.

Drawing from studies of patients who sustained brain injuries, Gardner theorized that each intelligence is associated with a specific area of the brain. While he was able to provide extensive research to validate the eight intelligences currently acknowledged, mapping an area of the brain associated with existential intelligence has proven difficult. For that reason, existential intelligence has not yet been fully confirmed by Gardner. However, there is significant evidence to suggest that using it with students in the classroom is beneficial. We have therefore elected to include existential intelligence in the *AchieveWorks Intelligences* assessment, along with the eight intelligences formally endorsed by Gardner thus far.

Here's a closer look at the nine intelligences in *AchieveWorks Intelligences*, along with suggestions for facilitating each intelligence within a learning environment.

Bodily-Kinesthetic Intelligence

This intelligence involves a person's ability to move and manipulate their body and objects within their environment in a proficient, coordinated manner. It includes the ability to control both gross and fine motor muscles. It also involves coordinating the mind and body to control muscle groups so as to perform and remember body movements.

Control of bodily movement occurs mostly in the motor cortex. Certain injuries to this region of the brain can cause apraxia, which is the inability to perform movements purposefully despite having the desire and physical capability of doing them. Individuals suffering from apraxia can still perform movements reflexively, indicating that the ability to perform controlled and coordinated movements is a separate, higher-order function.

People with superlative bodily-kinesthetic intelligence can perform complex and rapid coordinated movement almost effortlessly. They also seem to be able to learn these movements naturally, often innovating and improving movements to be faster or more effective than before. Exceptionally talented athletes and other physically skilled people are also more likely to experience "flow", a state of motivation and complete involvement, in their respective sport.

Bodily-kinesthetic intelligence is of great benefit to those pursuing careers that focus on physical movement or manipulation of tools and instruments. Additionally, when this intelligence is used to enhance understanding of non-verbal communication, one's abilities as an interviewer, speaker and general communicator can be significantly enhanced.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' bodily-kinesthetic intelligence:

- Take short movement breaks during class time.
- Permit students to handle objects such as a stress ball while learning, as long as it is not distracting.
- Have students complete reports and other assignments by acting out skits, building models or creating dioramas.
- Use exercise balls instead of chairs.
- When possible, use models and physical objects to demonstrate concepts. Allow students to touch or manipulate the objects.
- For science, include labs with hands-on tasks and experiments.
- For language arts, include reading material and topics for writing that include a lot of action and movement.
- For social studies, allow reenactments and demonstrate physical objects that can be handled.

- For math, try to integrate mathematical concepts into measurement and calculation of their physical abilities. Also, use physical objects that need to be manipulated to demonstrate mathematical concepts.

Interpersonal Intelligence

This intelligence includes understanding and working with people, establishing and maintaining person-to-person relationships, seeing the world from another's perspective, communicating well verbally and non-verbally, cooperating in a group, having influence, and responding to the mood, temperament and intentions of others.

Research suggests the frontal lobes are responsible for processing information about social awareness and interaction. People with damage to the frontal cortex or disorders like Pick's disease, a form of dementia, can undergo drastic personality changes and lose social awareness.

Exceptional interpersonal skills can exist without the benefit of language or even vision and hearing. The story of Anne Sullivan and Helen Keller is an example. Sullivan, who was visually impaired, was able to teach Keller, a deafblind, by reading her temperament, motivation and intentions. Up to that point Keller had been unreachable, even by her own parents. Despite her sensory impairments, Keller went on to display strong interpersonal skills herself, becoming a public speaker and social activist.

Other examples of exceptional interpersonal intelligence include political leaders who can sway a nation or a celebrity who captures everyone's attention (through charisma and audience awareness rather than outlandish acts).

Because such skills are greatly valued, many interpersonally oriented people are drawn toward, or even pulled into, leadership and influencer roles such as managers, administrators, school principals and policymakers. In these positions it is important not only to win the confidence of others, but to be able to change their attitudes to something more positive and flexible. Many therapists, social workers, nurses and teachers have a strongly developed interpersonal intelligence, as they possess the ability to relate to and empathize with others.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' interpersonal intelligence:

- Bring in guest speakers and allow students to interact with each speaker. Encourage students to come prepared with well thought-out interview questions.
- Alternate discussion, assignments and other projects from individual to pairs to groups to full class discussion — possibly even multi-class projects.
- Apply lesson strategies such as cooperative learning, learning by teaching, think-pair-share, interviewing and other active learning exercises.
- Assign roles for group work and make sure students vary their roles over time.
- Encourage students to engage in *safe* online forums and discussions on pertinent topics.
- Get students involved in a social cause that relates to a class topic.

- Introduce and practice listening skill exercises.
- Use activities where students can role play.
- Implement assignments that allow students to interact with people outside the classroom, outside the school, outside the community or even outside the country.

Intrapersonal Intelligence

Intrapersonal intelligence includes the ability to self-reflect – to understand one's own emotions, fears, motivations, strengths and weaknesses. This intelligence enables a person to objectively reflect upon their own thinking and behavior, learn from that reflection, seek future self-improvement and establish inner self-confidence. Metacognition, an awareness of and control over one's own thinking and learning processes, is directly related to intrapersonal intelligence.

Intrapersonal intelligence stems from the prefrontal cortex of the frontal lobes. People with damage to this region are often socially capable (using their interpersonal intelligence), but display impulsive behavior and poor planning or decision-making skills.

Intrapersonal intelligence is somewhat unique in that it is difficult to observe. Thought and reflection can be detected, but exactly what is going in someone's head is known only to them. We are reliant on language or some other observable behavior that results from metacognition for intrapersonal intelligence to be seen or measured. Thus, intrapersonal intelligence can be interfered with or supported by the other intelligences more so than the other intelligences.

Keeping this in mind, some exceptional examples of intrapersonal intelligence are the great Greek philosophers. In The Apology, an account of Socrates' defense in a trial for his life, Plato quoted his mentor: "I am indeed wiser in some small way...in that I don't think myself to know what I don't know."

The skills associated with intrapersonal intelligence are useful in a variety of careers – whether striving to help others become more self-aware and problem solve better, as in psychology, social work, literary arts or education, or in fields that seek to answer long-held mysteries of our past, present or future, as represented by the work of physicists, archeologists, medical researchers and many other fields of endeavor.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' intrapersonal intelligence:

- At times, slow things down and build some reflection time into the normal routine.
- Have students create a vocabulary list of words that describe their feelings at various times, and have them share and expand their lists over time.
- Post a list of learning reflection-type questions in a visible place. Have students think about and record their answers at the start or end, or both, of each chapter or unit. Some sample questions:
- What do I know now?
- What do I want to learn more about?
- Why might this be important to me? How can this affect me?
- What has helped or will help me learn this effectively? What will hinder me?

- Model metacognitive thinking: for example, wonder aloud as you go through the reasoning of the learning material, or describe what famous people might have been thinking as they made new discoveries. Focus on the metacognitive process.
- Use lesson strategies like role playing, KWL and SQ3R reading methods, and cooperative learning.
- Assign goal-setting activities, and ensure students consistently revisit their goals and track their progress.
- Have students complete a learning-related self-assessment. Then have them analyze their strengths and challenges to determine their *personal* optimal approach to learning.
- Offer students choice in how they receive content or how they present it, and clearly differentiate between the choices.
- In addition to grade, introduce other measurements of student growth. Some examples are curriculum-based measurement and individual learning plans.
- Involve students in developing rubrics when possible.

Linguistic Intelligence

Linguistic intelligence includes the ability to understand and use language effectively in reading, writing and speaking, and in other symbolic forms such as sign language and Braille. It also affects vocabulary and the ability to recognize and use humor, create verbal images, understand language patterns and recognize relationships between words.

Linguistic intelligence is one of the main intelligences associated with academic success. It is important to note that linguistic intelligence is not necessarily dependent on ability with spoken or written language. Language can come in the form of gestures, as in American Sign Language, Braille and other forms.

It has long been thought that the main language centers of the brain include Broca's area (which deals with the production of speech and the expression of language) and Wernicke's area (which is involved with the comprehension of written and spoken language), though the processing of language is complex and does involve other areas of the brain. There are many types of aphasia, a disorder that impairs a person's ability to process language, indicating a complex network in the brain processes language in different stages and in different media.

Language savants are not rare, but an exceptional story is that of the linguist Jean-François Champollion. His formal education began late in his childhood, yet he was able to work in almost 20 languages by the age of 20. He went on to decipher the famous Rosetta Stone, which led to the first real understanding of ancient Egyptian hieroglyphs.

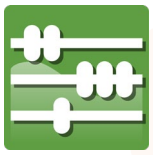
Because linguistic skills are used to both interpret and communicate information to various audiences, being attuned to this intelligence opens up many occupational choices. For example, journalists, religious leaders, teachers, speechmakers, lawyers and counselors all require good linguistic skills. Many screenwriters, comic-strip artists and playwrights have also built careers on their ability to create memorable lines for the public's enjoyment.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' linguistic intelligence:

- Schedule time in a computer lab or other time for online access to allow students to read articles of interest on applicable subjects. Wikipedia is a useful site for students to explore (and even add to) topics, because each article is filled with links to related topics from which they can pick and choose.
- Talk about the roots of new vocabulary as they appear in the subject area.
- For those with online access, encourage students to keep a (private) blog over a period of time. Then have students pick one of their favorite blog entries to share with you or other students.
- Invite guests with good speaking ability to address the class and have students pay close attention to the language used.

- Allow assignments to be completed using a storytelling style, whether verbal or written.
- Use debates and formalized discussions to cover topics.
- Challenge students to write about topics using a limited number of words, but ensuring that they convey all the necessary information. This will prompt them to think about wording very carefully.
- Encourage students to take breaks when reading to reflect on what they have read, make connections to what they already know, and to write down or sketch a few important ideas that summarize what they have just read. Practice SQ3R and KWL reading.
- Have students work in pairs or groups to analyze each other's writing.
- For people with linguistic challenges, suggest they write fun children's stories or even analyze children's books from a more adult perspective. Such stories provide a great start for the basics and can easily progress into more complex elements of writing. An added advantage of using well-known children's books is the availability of professional reviews for reference.



Logical-Mathematical Intelligence

This intelligence includes a good ability to reason inductively (make conclusions based on observations) and deductively (make conclusions based on hypotheses). This intelligence also involves finding relationships between abstract ideas (for example, working with numbers), recognizing logical sequences and patterns, recognizing problems and solving them. This intelligence is closely associated with academic success.

Areas of the brain for logical-mathematical intelligence include the intraparietal sulcus, where the temporal and parietal lobes meet. Damage to this area may cause a condition known as dyscalculia, which is similar to dyslexia but involves numbers rather than letters. Dyscalculics have a hard time conceiving of numbers or estimating how many objects are in a set. A person with dyscalculia may regard a group of six objects and have to count them from one to six to comprehend that there are six objects. A person without the condition could quickly and accurately guess the number without counting.

Logical reasoning is likely dispersed throughout all lobes of the neocortex as logic may be applied in different contexts such as math, language and spatial area. Although much popular science attributes logic to only the left hemisphere of the brain, recent research points to a more distributed model and significant differences between individuals and, again, context for the logic.

There are many examples of people with exceptional logical-mathematical intelligence. Perhaps most striking are people with savant syndrome, who display extreme proficiency in one or more areas but also have developmental disabilities. Math savants display amazing accuracy and speed with complex calculations. Also, talented scientists have been able to perform complex thought experiments that have led to very advanced theories – Einstein did this, for example, when he developed the Theory of Spatial Relativity.

Many fields utilize the skills of logical-mathematical intelligence. People with this intelligence are sought out to analyze, test, sequence, experiment, predict and discern what is important or reliable, and to observe the subtle relationships between concepts or numerical expressions. Careers in areas such as engineering, architecture, economics, physics, astronomy, forensics, chemistry, social research, medicine and technology require a strong logical-mathematical intelligence.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' logical-mathematical intelligence:

- Review the fallacies of reasoning (flawed reasoning that appears to be sound) with students. See if they can identify instances of the fallacies in advertising, mass media, opinion articles, and letters to the editor or even in their own previous work.
- Provide riddles, games and puzzles that rely on logic as a fun way to foster interest and skill.
- Present games and puzzles that require math skills in order to be solved.

- Have students practice creating hypotheses before answers are revealed. Then have them test their hypotheses. As they test, discuss methods for testing and how to ensure their results are valid.
- Discuss divergent and convergent thinking and inductive and deductive reasoning. Have students apply these types of thinking to various concepts and lessons. Combine this with spoken metacognitive thinking, so that students can see it modeled by you and other students.
- Use instructional strategies like concept mapping, concept formation and concept attainment.
- Demonstrate how to identify problems early, rather than waiting until they have an apparent effect or are pointed out. Have students imagine scenarios playing out ahead of time. You'll need to consider many possibilities for each scenario. Some examples are: visualizing 10 moves ahead in a game of chess; comparing the next three batters to the pitcher on the mound and the pitchers in the bullpen; or choreographing a series of dance steps to match a length of music.
- Show how math can be related to other subjects. Math teachers can confer with teachers in other subject areas to design math problems that integrate with those other areas.
- Integrate math into long-term projects where math can be used in the context of real-world applications and in other subject areas.

Musical Intelligence

As well as the ability to play an instrument or sing, musical intelligence encompasses a number of other capacities, such as recognizing and distinguishing tones, tonal patterns, rhythm and beat, discerning and differentiating sounds, enjoying and analyzing music, understanding musical structures, and creating melodies and rhythms.

Even very young infants display sensitivity to music. Research shows that infants can discriminate pitch and tempo. When the right temporal region of the brain is damaged or deficient, those individuals may display amusia, the inability to process pitch and the loss of musical memory and recognition.

Many well-known musical prodigies displayed exceptional talent in music at a very young age. Closer examination reveals that complete mastery results from a combination of natural inclination towards music *and* a great deal of time spent developing musical skills. Interestingly, this intelligence can develop and be applied in the complete absence of hearing ability. An example is Ludwig van Beethoven, who continued to compose, conduct and perform music after going completely deaf in his late twenties.

Besides musician, there are many careers that utilize a range of musical intelligence skills like tempo, rhythm and dynamics. Fields such as acting, directing and comedy have a particular relationship to timing, highlighting the best moments to speak, raising or lowering the intensity level and so on.

Moreover, people who are able to notice rhythms, patterns and other musical elements usually appreciate many of the natural and manufactured creations in our world, such as those found in architecture, sciences, the arts and cultural diversity, among others.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' musical intelligence:

- Play non-distracting background music during learning. Note that this does not directly develop musical intelligence. However, it can help students learn to appreciate music and may help those who are already musically inclined to work more effectively.
- Challenge students to find rhythmic patterns in everyday sounds and events – for example, a pencil being sharpened, birdsongs, the chirping of crickets, heating and cooling systems, clocks, people's speech, cars passing by, and so on.
- Expose students to many genres of music and make comparisons between them.
- Connect music to other subject areas. Some examples:
- Science — the physics of sound, harmonics and pitch, and the musical/auditory centers of the brain.
- Social Studies — music from prehistoric times though to the present; music across cultures; psychology of music, from advertising to relaxation to stimulation.
- Mathematics — measurement of pitch in octaves and harmonics; tension in string instruments and percussion.

- Language Arts — lyrical writing and poetry, with a focus on rhythm and tone of language.
- Technology — music editing, synthesizing and remixing.
- Trades — instrument design and construction, soundproofing and acoustics in construction.
- Accept assignments in musical format – content delivered as lyrics in a song, for instance.

Naturalist Intelligence

Naturalist intelligence involves being able to recognize, appreciate and classify various features in the environment, such as plants, animals, people, structures, weather patterns and landscapes. It also allows one to see the connections between different parts of the environment, to easily recognize when environmental changes occur, and to understand what impacts those changes might have.

At a very young age, many children become very good at discriminating between different types of dinosaurs based on their features. And, there are cases of brain-damaged individuals who are unable to identify or classify living things, yet are still able to identify everyday objects. The ability to quickly distinguish between different living things would have been quite helpful for our ancestors in recognizing animals as predator or prey, plants as nourishing or poisonous, and climate and land as hospitable or harsh.

Exceptional natural intelligence allows a person to gain a rapid and thorough understanding of living things and natural processes as they are exposed to them. They also tend to be drawn to spending time in natural environments. Charles Darwin, Dian Fossey, Jacques Cousteau and Steve Irwin appeared to be very much at ease in natural surroundings. They all had a fascination and respect for nature that led them to spend more time in nature and, in turn, to gain an exceptional understanding of it.

Naturalist intelligence can be applied and developed in many diverse places, not just remote areas. For example, it can be used in the kitchen when determining food combinations and cooking processes. It has applications in weather forecasting, where predictions are based on an understanding of climate and weather conditions. It can also help in areas like fashion design, where a knowledge of how to work with texture and materials is key.

There are many careers that utilize naturalist intelligence, including forensics, investigative research, park service work, landscaping, occupations in the culinary arts and many more in the fields of geology, botany, zoology and ecology. However, students need not wait to find a career to become involved. Many animal rescue and nature centers appreciate having volunteers assist with daily tasks like caring for animals, teaching the public and helping to increase naturalist intelligence in others. Townships, cities and non-profit organizations are often looking for new ideas to create more sustainable systems that produce less waste and build cleaner futures. These are just a few of the many ways to get involved and develop naturalist intelligence.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' naturalist intelligence:

- Connect nature to other subject areas. Some examples:
- Math — examining animal and plant population changes based on predator-prey relationships and the impact of humans on those populations; measurements of pollutants over time and changes in concentration across the food chain.

- Social Sciences — exploring the relationship between humans and animals and plants in different historical periods.
- Language Arts — introducing pieces of literature and writing styles that focus on nature.
- Draw comparisons and analogies between nature and other concepts that students are learning.
- Start or encourage school-based clubs around topics such as astronomy, environment, animal rescue or community gardens.
- Integrate various subject areas into field trips to parks, zoos, gardens and other natural settings. Combine work from multiple subject areas. For example, visit a natural area threatened by development and have students: learn about different species in the area (science); take measurements and evaluate the potential impact to animals and plants, then calculate the economic impact of development (math); explore the political process and organizations involved in development and the protection of natural environments (social studies); write a position paper based on their findings (language arts).

Spatial Intelligence

Spatial intelligence includes the ability to perceive objects accurately, transform and recreate images, and recognize how shapes and objects relate to each other. While this intelligence is typically applied through visual means, spatial intelligence is not dependent on vision. Spatial intelligence can be employed through touch and sometimes even hearing.

The posterior regions of the right parietal cortex (or the left parietal cortex in a few people) indicate a specialization for spatial intelligence. Problems with this region can influence spatial perception, affecting the ability to accurately reach for and grasp an object, for instance. This region is also connected to spatial memory, remembering where things are in relation to one another.

In the Caroline Islands, a cluster of hundreds of tiny islands in the Pacific, indigenous sailors are taught to navigate using a mental picture of the islands in relation to the positions of the stars. These sailors are then able to travel without instruments between islands that stretch across 1,500 miles of the Pacific Ocean.

Another example of exceptional spatial intelligence is Turkish artist Eşref Armağan, who has been blind from birth but can very accurately draw and paint representations of people, buildings and more, simply by feeling them with his hands. He even has the ability to draw with perspective, which indicates that he is able to visualize how to translate three dimensions (what he feels) into two dimensions (what he draws) – an astounding feat considering he is blind.

Career areas that are particularly involved with spatial intelligence include architecture, engineering, design, navigation, geography, astronomy, photography, filmmaking and professional sports, among others. In each of these areas, spatial intelligence better enables a person to visualize, recognize patterns, judge orientation and distance, and imagine new possibilities.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' spatial intelligence:

- Use graphs, charts, diagrams and other visual references when possible.
- Encourage students to visualize when learning concepts or prior to performing movements (such as those in music and physical education).
- Allow assignments to be completed in visual-spatial format, using diagrams, models, videos, PowerPoint and so on.
- Organize learning space in a way that spatially organizes concepts. For example, in a language arts classroom there is a corner for poetry, a corner for novels and a corner for spelling and grammar.
- Use color-coding and other visual-spatial organization methods for different materials. Have students organize their binders in such a way.
- Refer to mind maps and other visual representations of concepts.

Existential Intelligence

This intelligence involves the ability to view the "big picture" of how the world works, and to ask questions that go beyond our normal sensory experiences.

People with a high level of this intelligence are more able to make connections between broad concepts and minute details. They tend to seek answers to difficult questions like, “What is the meaning of life?” They also seem more aware of their place in the world, and how everything fits together. Children who are described as “old souls” are considered to have strong existential intelligence.

Nearly every culture values this intelligence: religion, philosophy and mythology are evidence of this. It is thought that these practices allow individuals and communities to think beyond the scope of their daily activities and consider their purpose and direction, so they can grow and progress towards a larger goal.

People with exceptional existential intelligence are the big thinkers – the ones who are able to conceive significant ideas before anyone else. Examples include Copernicus proposing that the sun, and not the Earth, was the center of our solar system and Gandhi leading a successful revolution using non-violence.

Existential thinkers are especially attracted to careers in philosophy, theology, design, cosmology, mathematics, physics and the arts. However, many who enjoy pondering life’s weighty questions also enter fields where details are continuously being added and assembled, like a giant puzzle, in order to find answers. One example is archeology, where artifacts are unearthed and new facts are discovered. This allows us to develop new theories about human, plant or animal existence.

In the Learning Environment

Allow and encourage the following strategies to accommodate and develop students' existential intelligence:

- When discussing or introducing topics, make connections to the big picture often. Talk about why each topic may be important and for whom it is important.
- Strongly encourage questions, especially those that ask “Why”.
- Encourage students to think of comparisons or analogies with what they already know.
- Use mind or concept mapping, the reading comprehension method SQ3R (**S**urvey, **Q**uestion, **R**ead, **R**ecite and **R**eview), KWL reading ("what we **K**now", "what we **W**ant to know", and "what we **L**earned"), and learning by teaching, a method in which students help teach lessons.
- Play devil’s advocate with conventional thinking, and let students know you are doing so. Suggest students play devil’s advocate with their own views from time to time.
- Encourage debates and discussion in which many points of view are presented. Have students role play in assigned characters that have different points of view from their own.
- Collaborate with other departments and teachers on cross-curricular projects.

- Have students summarize what has been taught recently and relate it to other concepts learned in that subject and to other subjects.
- For non-art based subjects, try to draw connections to art where possible.

Using *AchieveWorks Intelligences* with your Students

While the scientific community continues to debate how best to define and measure intellect, multiple intelligences theory has been heartily embraced by educators and institutions seeking a more holistic and student-centred approach to education and development. In your role as counsellor or adviser, you've likely encountered students who lack self-esteem, do poorly in school and struggle to keep up with classmates. *AchieveWorks Intelligences* will broaden your view of these students' intellectual abilities and provide you with tools to help them learn in ways that are *relevant to them* – helping them to build confidence, improve academic performance and enjoy greater success at school and work and in their personal lives. With an appreciation of their unique abilities, it is within every student's grasp to enhance and take greater advantage of their gifts and to improve on their challenge areas.

With its emphasis on recognising and building every one of an individual's intelligences, rather than concentrating on language and maths skills to the near-exclusion of all else, a multiple intelligences approach supports a more egalitarian learning experience. Within a multiple intelligences environment, 'gifted' includes high achievers with talents in *every* intelligence, not just those with strong maths and language skills. It also increases the likelihood of reaching students at the other end of the spectrum—those who are at-risk in school and might otherwise fall through the cracks. Students, gifted or struggling, who might have been overlooked in a traditional setting, stand to garner more equal attention and a more accurate evaluation of their abilities in a multiple intelligences classroom. And educators, less encumbered by the requirements of mandated curriculum and standardised testing, have more flexibility to tailor lessons, instruction and assessments according to how different students learn best.

AchieveWorks Intelligences also applies to students who already do well in school, helping them zero in on career direction and providing suggestions to develop their strengths in ways the traditional education system cannot. The report can also help highly academic students learn how to expand their 'intelligence repertoire', so that they are more well-rounded and ready for the variety of tasks and problems they will encounter outside of school.

AchieveWorks Intelligences and multiple intelligences theory can be applied in several ways to improve student success. It is always preferable to consider each person individually to determine the most effective methods of working with them. This is often impractical, however, particularly if you are responsible for a large number of students. As an alternative, you may wish to consider whole classroom—or even entire school—adaptations designed to nurture and develop all of the intelligences.

The key is to provide students with choice and empower them to choose what will benefit them most. By understanding your students' intelligence profiles, familiarising yourself with the suggested strategies in *AchieveWorks Intelligences* and presenting information in ways that consider students' unique talents and challenges, you can make learning more meaningful for all of them.

Here are some general guidelines applicable to all situations when using *AchieveWorks Intelligences* with students:

Leverage Students' Strengths

Each student has their own unique intelligence profile. Some will have strengths in intelligences not ordinarily addressed in school—existential intelligence, for example, or naturalist intelligence. These students may not have the same opportunities to shine when compared to classmates who excel in intelligences more commonly evaluated in school, such as linguistic or logical-mathematical.

It is important to seek out and provide avenues for these students to learn via their strengths—and to allow them to express what they have learned through their strengths as well. You can help by using your knowledge of students' intelligences and preferences to incorporate relevant material into classroom activities and instruction, and by allowing students to be assessed using methods that accommodate their strengths.

Understand Students' Challenges

Identifying a student's less-developed abilities is equally as important as recognising their strengths. A knowledge of each student's challenge areas can be of immense help in averting frustration for teachers, parents and, of course, the students themselves. Once weaker intelligences have been identified, it becomes much easier to choose a starting point and set a realistic plan and pace for development.

While they may be tempted to shy away from challenge areas, it is important that students spend time developing all of their intelligences. Be sure to include learning activities in which students can employ their stronger intelligences to help them strengthen and complete tasks in their weaker ones. This will help them build confidence and enhance their ability in less-developed intelligences.

Empower Students with Choice

Implementing multiple intelligence theory does *not* require individualised education plans for every student, nor does it require you to create nine different lessons for every topic in the curriculum. Instead, encourage students to approach topics from their strengths—and give them the power to choose. They can learn how to do this by using the strategies outlined in their *AchieveWorks Intelligences* report.

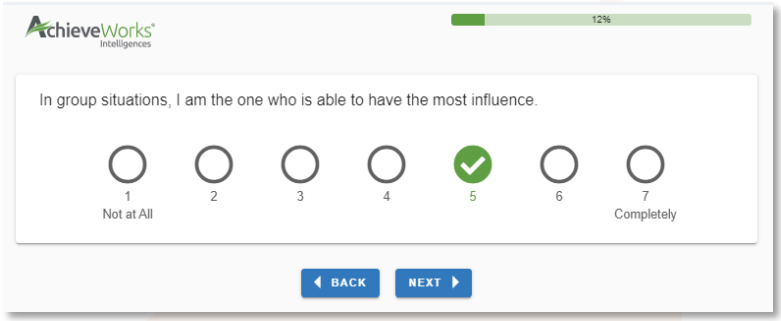
You can also help by varying teaching methods and classroom activities regularly, and creating an engaging and stimulating environment in which to learn. Build flexibility into the learning process and evaluation methods so that students can utilise their strengths to learn rather than being forced to use their less-developed intelligences. Mandated curricula and learning outcomes define what needs to be learned, but not *how* students learn. So be flexible and get creative.

Even if you are not able to provide individualised learning, understanding how to accommodate different intelligences allows you to provide options for a variety of students. *AchieveWorks Intelligences* enables students to determine which options will work best for them, helping them build self-knowledge and confidence. An awareness of their personal strengths and exposure to a variety of learning and evaluation methods will help them be better prepared for a future that will demand a variety of skills.

The Assessment

The program is straightforward and easy to use. Intended for students in Year 8 (or equivalent) and up, *AchieveWorks Intelligences* can be used in a group or classroom setting or individually in a self-directed fashion. Every user, whether student, counsellor or administrator, is set up with a secure online portfolio prior to beginning. Within their portfolios, students can access the assessment, view their reports and store saved items. Special features in your staff portfolio allow you to track students' progress and view their results. Administrators have the ability to manage all access to *AchieveWorks Intelligences* at your institution.

The *AchieveWorks Intelligences* assessment consists of 54 questions and takes less than 20 minutes to complete. It quickly and accurately evaluates a student's abilities in the nine intelligences: bodily-kinaesthetic, interpersonal, intrapersonal, linguistic, logical-mathematical, musical, naturalist, spatial and existential.



Presented as a graphical, seven-point rating scale, each question asks the student to select one of seven responses indicating the degree to which they agree with a statement.

Before administering the assessment, explain to your students that:

- The assessment should not be taken when they are tired or in a rush to complete it.
- There are no right or wrong or good or bad answers.
- They should select the response that comes to mind first and not overthink it.
- They should answer the questions honestly and not try to manipulate the results in order to come across as what they *want* to be or feel they *should* be.

By following these simple guidelines, students will improve the accuracy of their results and be better equipped to make optimal use of the suggested strategies within their report.

The Results

Upon completion of the *AchieveWorks Intelligences* assessment, the student's results are scored and they receive an instant, personalised report based on their responses to the questions. The report contains a visual bar graph illustrating their multiple intelligence profile. It also lists traits from their top-ranked intelligences, provides links to careers that match their profile, and offers comprehensive details on each of their intelligence areas, along with suggested strategies for further developing their intelligences.

The report consists of four sections: **Intelligences and You, Developing Your Intelligences, Emotional Intelligence (EI),** and **Career and Pathways**.

Intelligences and You

AchieveWorks Intelligences allows you to quickly and easily obtain intelligence profiles for each student, along with suggested strategies for teaching them how to boost their strengths and use their more developed intelligences to build weaker areas.

The intelligence profile is generated as a bar chart, based on the results of the student's self-assessment. Each bar in the chart denotes a specific intelligence. The length of the bar reveals the relative level of that intelligence and whether it falls into a low (orange), mid (blue) or high (green) range. Intelligences that fall into the low range indicate the student's challenge areas. Those that reach into the high range signify the student's strengths.

The bar graphs represent percentile rankings. That is, they indicate how the student's survey responses rank in comparison to those of others who have also completed the assessment. There is no absolute scale for intelligence so a relative scale must be used. As such, you may find that some students have several, one, or even no intelligences falling into either the high or low range.

Care should be taken to avoid comparing students or labeling one student as more intelligent than another—whether in individual intelligences or the profile as a whole. We have deliberately omitted numbers from the scores for exactly this reason.

Developing Your Intelligences

Students' intelligence profiles can and *should* change as the students work on strategies to develop their intelligences. Low-scoring intelligences can be improved, and mid- to high-scoring intelligences can be bettered. The profile is intended to be a guide to help students understand more about themselves at the current time and how they might focus their efforts to improve in all areas and maximise their success in school.

The traits help students to realize that they already have areas of strength, which may not have been recognised before, and that those can be used in school to help them be more successful. By discussing their top-ranked traits with you, students can begin to learn how to use and build their strengths to their fullest extent. While a student may not necessarily have developed all of these abilities to the same degree, they should recognise at least some traits in the list which are already strengths for them. They should also realise that they have the potential to develop the others to a greater level.

There are various reasons why a student might exhibit low scores in certain intelligences. For example, the student may have natural difficulties in that area. It is also possible the student actually has a strong natural ability in that area, but has thus far been denied the opportunity to develop the intelligence to its fullest potential.

Regardless of where students start, proponents of multiple intelligences theory strongly believe it is possible to develop all of one's intelligences to a reasonably high level – assuming, of course, that there are no physical barriers, such as injury or brain damage. All that is required is an appropriate level of support, plenty of motivation and creative instructional methods that accommodate all intelligence types. Above all, students must be permitted to use their individual strengths in order to be successful.

As self-assessments are prone to subjectivity, you are encouraged to seek additional input to gain a more complete picture of a student’s intelligence profile. This input may come in the form of observations from classroom teachers, parents, coaches and other adults who observe the students engaging in various activities.

These observations are more useful when they are comparative. For example, look for statements such as, 'James displays coordination and timing that surpasses that of his classmates.' Or, 'Audrey shows a unique gift for solving puzzles.' These statements indicate that the student excels in their use of an intelligence in relation to the level of ability demonstrated by peers of similar age and experience. Conversely, a statement such as, 'Sidney does not contribute well during class discussion,' indicates the student is lagging behind classmates' performance in that area.

Emotional Intelligence

The term 'emotional intelligence' has been defined in various ways and used to mean different things. Human eSources takes a broad approach and defines it as*: The ability to recognise and manage your feelings and behaviour, and those of other people, in a way that is beneficial.*

AchieveWorks Intelligences provides an approximation of one's emotional intelligence (EI) by combining a person's scores for interpersonal and intrapersonal intelligences, a measure that provides the individual with a starting point from which to work.

In this section of the report, EI is broken down into 14 constituent traits. Individuals self-rate their level of each trait to gain a better understanding of their strengths and challenges. Viewing emotional intelligence from this perspective can help individuals learn and practise specific skills to develop their overall EI.

14 Traits of People with Strong Emotional Intelligence

1. Adaptable: able to deal with new and changing conditions
2. Assertive: honest, direct and willing to stand up for yourself
3. Composed: think carefully before reacting and resist being impulsive
4. Content: happy and satisfied with your life
5. Empathic: ability to understand and respect people and situations foreign to your own experience
6. Expressive: can communicate your emotions to others in a healthy way
7. Influential: can guide others' emotions in a purposeful way
8. Intimate: build and maintain healthy and close personal relationships
9. Optimistic: have a positive outlook on future events
10. Perceptive: keenly aware of your emotions and those of other people
11. Regulated: able to manage your emotions and behaviour in a variety of situations
12. Resilient: can deal with pressure and stress in a healthy way
13. Motivated: persist and overcome difficulties to achieve goals
14. Connected: build social connections with many different people

Once individuals have completed their self-ratings, they have a few options in terms of next steps. Below are two examples:

1. **Make connections between the 14 traits and activities that can help develop those traits**. For example, the individual could consider what is needed to effectively complete an escape room. Have the person identify which of the 14 traits would be useful and, for each, explain why. Some other examples could be preparing for and writing an exam, playing sport as part of a team, writing a professional blog for publication or building a YouTube channel to gain a large following of subscribers.

2. **Follow the recommendations**: Read the recommendations below the 14 traits. Choose one or more recommendations that the individual could practise over the next two weeks. Make a plan for ways in which the individual can specifically apply the recommendations in their current activities. Also, record which traits might be further developed through this practice.

Career and Pathways

AchieveWorks Intelligences includes a database of over 900 career profiles, which are mapped to the intelligences. The correlations were devised by a team of consultants with expertise in psychometrics, multiple intelligences and vocational research. They used the typical tasks associated with each specific occupation to connect it to the intelligences.

To test validity the *AchieveWorks Intelligences* results were compared to data from the Career-Oriented Multiple Intelligences Test (COMIT), which in turn was compared to several other instruments to test validity, including:

- the Wonderlic Personnel Test (WPT)
- the General Aptitude Test Battery (GATB)
- the Canadian Achievement Survey Test for Adults (CAST)
- the Bar-On EQi

The consultants began by analysing the career tasks to determine the top three most closely related intelligences for that career. They then mapped the intelligences to the career in order, from one to three, using a weighted ranking system. When a student completes the *AchieveWorks Intelligences* assessment, their weighted average for the same three intelligences is calculated. This is then compared to their scores for other intelligences to determine each career's place in their list of top careers. Put more simply, from the user's perspective, if a student's top intelligence is also the top-ranked intelligence for a career, that career will have comparatively more weight – and thus more prominence – in their results.

The Career and Pathways section is loaded with the most up-to-date career data available. Students can click a career title to access a comprehensive profile of that career. On the main search page, filters allow the individual to narrow their career list results by using criteria such as career cluster, level of education, job outlook and salary.

By default, the list displays the student's *AchieveWorks Intelligences* results. In addition to these results, they can elect to view a combined results career list that incorporates their *AchieveWorks Personality* and/or *AchieveWorks Skills* results as well, depending on which assessment(s) the student has completed. The combined results option allows for greater perspective on potential careers. Those who wish to review the entire career database can do so by choosing All Careers.

In addition, students have the ability to run real-time searches for jobs available on Indeed.com, filtered by field of interest and preferred location (anywhere in Australia). This is particularly helpful when researching future job outlook.

Each career profile contains the following information:

Overview	Knowledge and Skills	Tasks and Activities	Wage
• Job description • Holland Code interests • Related occupations • Related majors • Job outlook • Education level	• 5 most important skills • 5 most important abilities • 5 most important knowledge areas	• Typical tasks • Common work activities	• Average national wage

After students have completed the *AchieveWorks Intelligences* assessment, they will be able to see a **Compare to Me** tab in each career profile. Presented in graphical form, this feature allows them to see exactly how their results compare to the traits typically expected for that occupation.

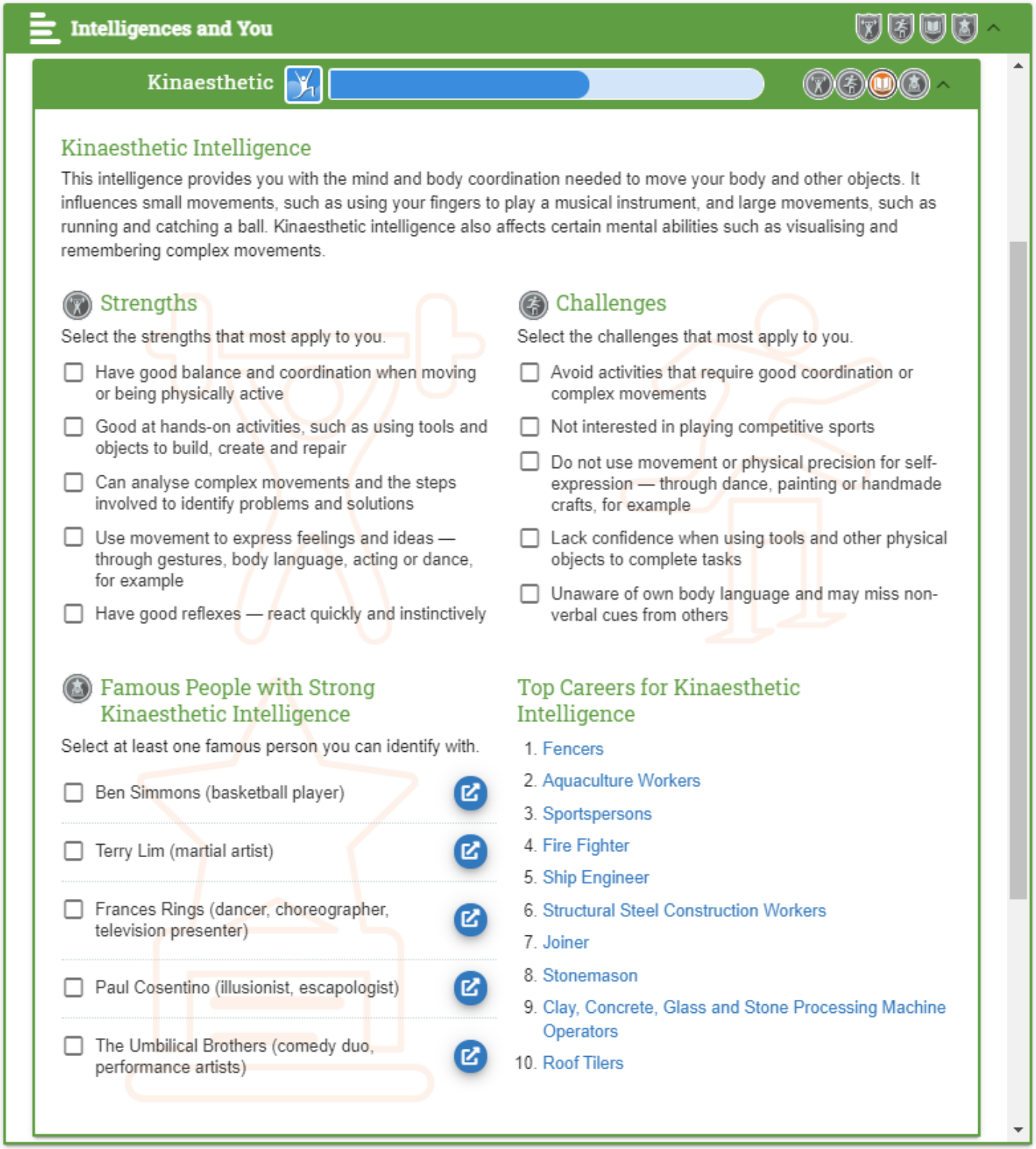
It is important to note that a student's top career results are not intended to suggest what occupations they must or should pursue. Rather, this feature helps them to see what kinds of careers are generally well-suited to those with a similar intelligence profile. You should encourage students to use these results as a starting point for further career exploration and research – not as a magic formula to help them decide what they should do with their lives!

Students will also benefit from reading career profiles that are not necessarily on their top careers list. Remember, intelligence profiles can change. As students learn more about themselves and improve their abilities, they may discover other occupations that interest them, or find that careers they once felt were not within their grasp are more achievable than they realised.

The Intelligences

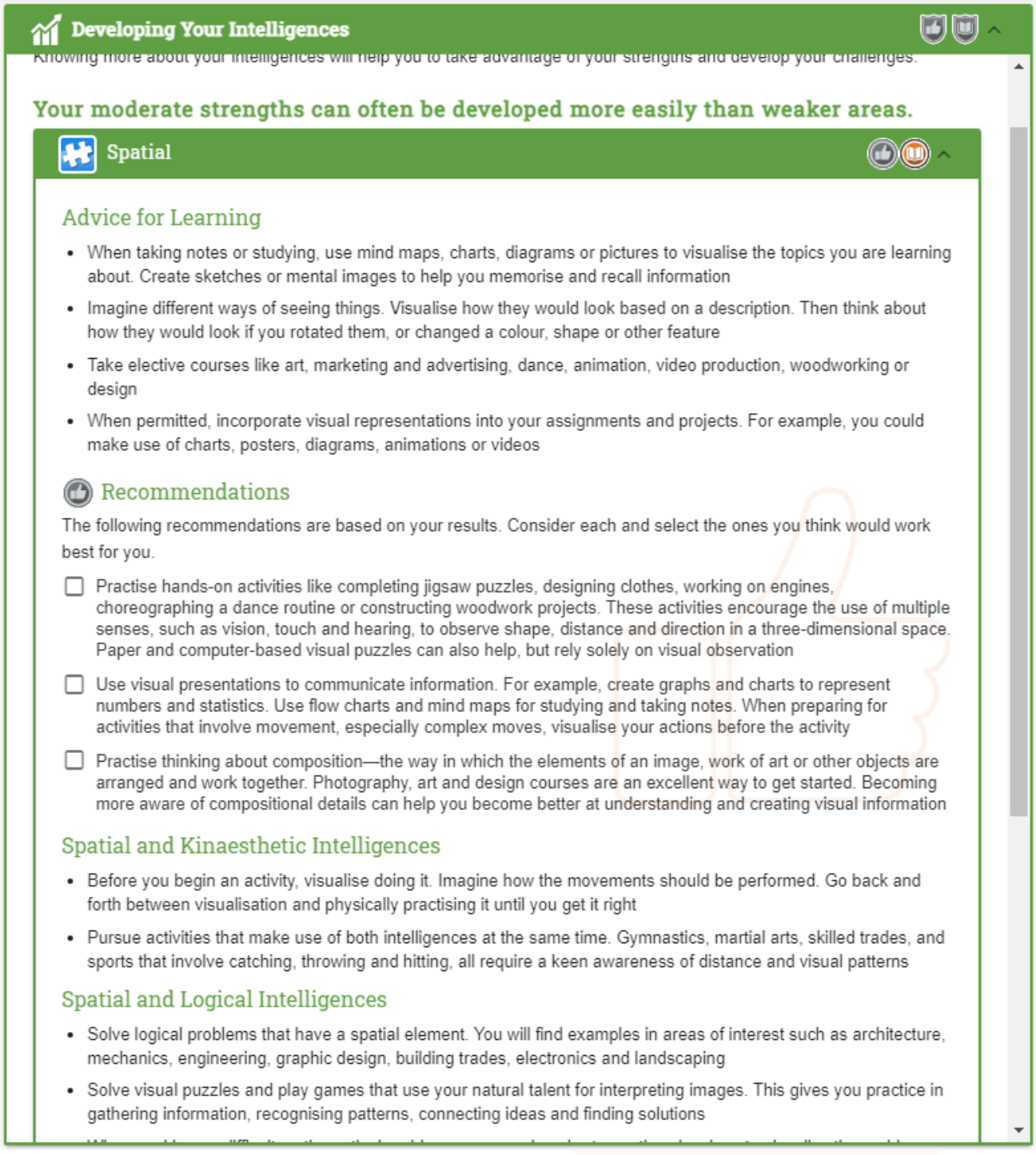
The **Intelligences and You** section contains expandable sections for the nine intelligences. Here, students will find details of each of their intelligence areas with:

- A graph that illustrates the student's orientation towards the intelligence, with scores extending from low to mid-range to high
- A description of the intelligence
- Strengths and challenges related to the intelligence with the option for students to select the ones that are most applicable
- A selection of famous people recognised as having strength in the intelligence
- Top careers for that intelligence


Intelligences and You
Kinaesthetic
Kinaesthetic Intelligence
This intelligence provides you with the mind and body coordination needed to move your body and other objects. It influences small movements, such as using your fingers to play a musical instrument, and large movements, such as running and catching a ball. Kinaesthetic intelligence also affects certain mental abilities such as visualising and remembering complex movements.
Strengths
Select the strengths that most apply to you.
Have good balance and coordination when moving or being physically active
Good at hands-on activities, such as using tools and objects to build, create and repair
Can analyse complex movements and the steps involved to identify problems and solutions
Use movement to express feelings and ideas — through gestures, body language, acting or dance, for example
Have good reflexes — react quickly and instinctively
Challenges
Select the challenges that most apply to you.
Avoid activities that require good coordination or complex movements
Not interested in playing competitive sports
Do not use movement or physical precision for self-expression — through dance, painting or handmade crafts, for example
Lack confidence when using tools and other physical objects to complete tasks
Unaware of own body language and may miss non-verbal cues from others
Famous People with Strong Kinaesthetic Intelligence
Select at least one famous person you can identify with.
Ben Simmons (basketball player)
Terry Lim (martial artist)
Frances Rings (dancer, choreographer, television presenter)
Paul Cosentino (illusionist, escapologist)
The Umbilical Brothers (comedy duo, performance artists)
Top Careers for Kinaesthetic Intelligence
1. Fencers
2. Aquaculture Workers
3. Sportspersons
4. Fire Fighter
5. Ship Engineer
6. Structural Steel Construction Workers
7. Joiner
8. Stonemason
9. Clay, Concrete, Glass and Stone Processing Machine Operators
10. Roof Tilers

The **Developing Your Intelligences** section contains expandable sections for the nine intelligences with:

- **Advice for Learning**, which describes how the intelligence can be used and improved at school.
- **Recommendations** for further developing the intelligence, regardless of whether it is currently a strength or a less-developed ability, and the ability to earn a pin.
- If it is a strength, **advice** on using this intelligence to help develop the other intelligences. If it is moderate or weak, advice on using other strengths to build this intelligence.



Encourage students to work through as many of the suggested strategies as they can, in as many different intelligences as possible. Explain that everyone has at least some of every intelligence inside them. Help them to understand how they can employ their strengths to develop their lesser intelligences by using the strategies in their profile.

It is important that students realise there is nothing wrong with them if they have challenges in some areas. Certain intelligences may be lower-ranked simply because they have not yet had the chance to fully develop them.

They also need to realise that every intelligence can be developed – strengths *and* weaknesses. Explain to them that strengths result from a combination of natural ability and a great deal of practise and support, and that even their strongest intelligences can always be further enhanced. Most importantly, their strengths can be used to help them build weaker intelligences and learn to accomplish tasks in their challenge areas.

Working with Different Types of Students

It is important to realise that students may experience certain difficulties if they lack ability in a particular intelligence. Weaker areas can affect a student's ability to keep up and perform well academically and to make expected progress in other aspects of their lives.

While this is not necessarily true of every student, it is something to be aware of. The following will assist you in identifying and working with students who are experiencing challenges of this nature.

Less-Developed Intelligences

When the intelligence is in a **low** to **mid** range, a student may encounter or exhibit the following difficulties:

Bodily-Kinaesthetic	• Exhibits poor penmanship • Lacks coordination during physical activities, such as in sports, dancing or playing an instrument • Reduced awareness of own and others' body language
Existential	• Has trouble connecting details to the big picture • Difficulty understanding and accepting unfamiliar opinions, values or beliefs • Disinterest in considering questions that have no clear or final answer • Poor ability to recall and relate factual details to explain a concept
Interpersonal	• Can appear insensitive to others' feelings, motivations or behaviours • Has trouble building and maintaining social relationships • Difficulty relating to others and working effectively as part of a team • Uncomfortable in situations that involve personal interactions with others • Doesn't always see the humour in things that others find funny
Intrapersonal	• May act impulsively, resulting in undesirable or negative consequences • Lacks self-awareness in social situations • Allows personal biases to affect decisions and interactions with others • Inability to set realistic goals • Difficulty understanding and managing emotions
Linguistic	• Difficulty expressing self in written or spoken form • Has trouble communicating with, and understanding, other people • Does not easily catch on to subtle forms of humour, such as irony, sarcasm or satire
Logical-Mathematical	• Difficulty making sense of mathematical and logical concepts • Exhibits poor reasoning and problem-solving skills • Unable to recognise and remember patterns • Feels inferior to or isolated from classmates
Musical	• Inability to distinguish between different sounds such as musical notes, instruments or noises in nature, industry or everyday life • Poor ability to remember melodies and song lyrics • Does not easily take to playing a musical instrument or singing

Naturalist	• Difficulty recognising and appreciating differences in plants, animals, weather and other elements in nature • Often feels anxious or uncomfortable when spending time in natural environments • Lack of understanding and empathy regarding environmental protection issues • Fears or dislikes insects, wild animals and sounds in the wilderness
Spatial	• Has trouble recognising objects and how they relate to shapes • Difficulty comprehending and retaining information presented in visual or physical form • Poor memory for navigational directions, faces and places • Difficulty reading maps, charts and diagrams • Has trouble estimating distance and measurements • Easily loses sense of direction

Additional Challenges or "What if…"

While we have tried to anticipate every potential scenario, at times you may encounter questions that have not already been addressed elsewhere in this handbook. Following are responses to some additional concerns that may crop up when presenting *AchieveWorks Intelligences* in the classroom.

Your student is not sure they have identified their intelligences correctly

No self-assessment will identify every person's intelligences accurately 100 per cent of the time. A minimum level of linguistic intelligence is needed just to read and interpret the survey questions. Also, a low level of intrapersonal intelligence may hamper the ability to answer questions honestly.

The first thing you should do is find out how accurate the student feels the intelligence profile is. This will help you feel confident that the information presented is valid for this student. If students do not feel their report presents an accurate description, there are a few things you can do to help them determine a more precise intelligence profile.

To begin with, you may simply suggest that the student take the assessment again. Alternatively, you might have them work through it with someone who knows them well, as the other person's insight may help the student to identify their intelligences more accurately. If neither of these efforts helps, we suggest you 37inimize the importance of verifying the intelligence profile and instead focus on ways to accommodate and develop all of the student's intelligences.

If you have the time and resources available, you could also try assessing the student directly within the domains of each intelligence. For example, you could test their musical ability with voice or instruments, their spatial ability with puzzles or maps, their bodily-kinaesthetic ability with physical coordination tests, and so on. This is the most accurate, but also most involved, method to assess intelligences.

Your student resists the notion of being 'labeled'

While the majority of students seem to enjoy discovering more about themselves and the validation it can bring, occasionally some students (as well as some adults) feel that profiling 'pigeonholes' or stereotypes them.

If a student is truly resistant, it is helpful to remind them that their intelligence profile can and should develop over time, and that it is up to the *student* to decide how useful and accurate the insights are. This process is designed to empower students: they should never be made to feel that they must accept a profile as theirs if it doesn't feel right to them.

Your student has a strong interest in a particular career but it doesn't show up on their list of recommended occupations

This may happen on occasion. The correlations between the occupations and the intelligences are based on the tasks associated with the career. Essentially, this reflects the person's ability to carry out those tasks successfully. However, unique instances of an occupation may use intelligences not generally connected with that career title.

Students should never be counselled into or out of a particular career based solely on the results of their assessment. When a student expresses an interest in a career that you do not believe is a good match –

based on the assessment or your own intuition and experience – you should make sure the student really understands what it's like to work in that career. This can be accomplished by encouraging the student to do field research or arrange a Work Experience. If the student has done this and remains interested, they should be encouraged to continue exploring this field.

Your student's list of possible careers doesn't include any jobs in certain career fields (for example, in the Arts). Does this mean the student isn't suited to arts-based careers?

No. This simply means that relatively few people with a similar intelligence profile to that of your student find this kind of work satisfying. However, students should always be encouraged to explore any occupational fields in which they have an interest. While *AchieveWorks Intelligences* can help them learn which careers may be a satisfying match based on their profile, there are always exceptions. Careers matched by intelligence reveal where students are more likely to be successful, rather than highlighting what their preferences are. Often these two dimensions are aligned, but some students may be good at many things though only interested in a few areas.

How should I respond to a student who questions the uniqueness of the information because their report is 'exactly like' a friend's report?

It should come as no surprise to your student to learn that people have a tendency to surround themselves with others who are similar to them. These two students may have connected through shared interests, which are also reflected in their abilities and other characteristics. However, while they may find parallels between their reports, there will usually be a difference in the degree to which they score high or low in a particular intelligence, because they may not have the same level of ability. It is also likely that there will be a dissimilarity in the degree of match in their top careers list, because their level of interest in each of the career fields may differ somewhat.

Implementation and Support

Before You Begin

Step 1: Prepare Yourself

Start this step about three to four weeks prior to the time you plan to have students complete the assessment.

- Take time to familiarise yourself with *AchieveWorks Intelligences* and its underlying theory. Use the information in this handbook to learn about the intelligences and how the assessment can help your students better recognise and strengthen their intelligences.
- Access the assessment and try it yourself. It takes less than 20 minutes to complete the questions and scan through the report.
- Consider, and discuss with colleagues, ideas for following up after students complete the assessment. The information in this handbook can assist with guidance and suggestions.
- This is also an opportunity to test your Internet connection and ensure there are no access issues with the website.

Step 2: Prepare Students

Start this step about one week prior to the time you plan to have students complete the assessment.

- Students should be given a very brief (no more than five to 10 minutes) explanation of the purpose of the assessment and what it measures. Allow students to ask questions about the assessment *before* they take it.
- Advise students that:
  - ✓ All results are equal; ***no*** choices are any 'better' than others.
  - ✓ They should answer with their true feelings; they should ***not*** try to answer the way they think they are *supposed* to answer.
  - ✓ They should respond in a way that reflects how they feel when they have *any* option, ***not*** how they feel in school, at work, or when others are judging their actions.
  - ✓ They should avoid completing the assessment when they are unwell, very tired, or emotional.
  - ✓ To help them answer accurately, they should think about what they *have actually done* in the past rather than what they *would do* in the future.
  - ✓ They should remember that answering honestly and carefully is the best way of ensuring they will get accurate results—and that these results can really help them.